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ABSTRACT

Drawing from local, state, and national data sources, this report from Johnson County Community College (JCCC) in Kansas summarizes the employment outlook in occupations corresponding to the college's career programs. The first section of the report offers 1992-2005 national employment projections, focusing on the fastest growing occupations, fastest growing occupations requiring some postsecondary or extensive employer training, and occupations with the largest numerical increases. This section indicates that: (1) employment will grow faster than the labor force; (2) industry employment will continue to shift from the goods-producing to the service-producing sector; and (3) the bulk of employment growth will be in health services, retail trade, and business services. The remainder of the report focuses on the employment outlook in the following fields: accounting; administration of justice/law enforcement; automotive body repair technology; automotive technology; aviation maintenance technology; business entrepreneurship; carpentry technology; chef apprentice; civil engineering technology; commercial art; construction management; data processing; dental hygiene; drafting technology; electronics engineering technology; emergency medical science; fashion merchandising; fire science; grounds and turf management; health information technology; hospitality management; heating, ventilation, and air conditioning technology; industrial programmable controls; interior merchandising; interpreter training; marketing and management; metal fabrication; nursing; occupational therapy assistant; office systems technology; paralegal; physical therapy assistant; printing technology; radiologic technology; railroading operations; respiratory therapy; sales and customer relations; veterinary technology; and welding technology. For each field, the report presents employment and salary information for the greater Kansas City area, for the state, and for the nation. For most fields, information on the average wages of JCCC career program completers and JCCC placement information is also provided. (KP)

ED 382 242

EMPLOYMENT, SALARY AND PLACEMENT INFORMATION

Related to Career Programs at Johnson County Community College

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DECEMBER 1994

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EMPLOYMENT, SALARY & PLACEMENT

INFORMATION FOR

JOHNSON COUNTY COMMUNITY COLLEGE

CAREER PROGRAMS

Karen A. Conklin, Ed.S.
Market & Survey Research Analyst
Office of Institutional Research
Johnson County Community College
12345 College Boulevard
Overland Park, KS 66210-1299
(913) 469-8500, Ext. 3443

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Preparation for tomorrow's jobs and the challenges posed by the new world economy will require an American work force that can adapt to changing workplace requirements, according to Robert B. Reich, Secretary of Labor. Global competition, changing technology and business practices, and shifts in the demand for goods and services are reshaping the American job market--making the need for comprehensive, up-to-date, and reliable career information more important than ever before.

Although workers with all levels of education and training will continue to be in demand, advancement opportunities generally will be best for those with the most education and training. Continued faster than average employment growth is expected among occupations that require relatively high levels of education or training.

General Predictions

Over the 1992-2005 period, employment will grow faster than the labor force and more than it did from 1979-1992. Industry employment will continue to shift from the goods-producing to the service-producing sector of the economy, but the shift will be less pronounced than during the previous 13 years.

As in the past, the bulk of the employment growth will be in three industries: health services; retail trade (including eating and drinking establishments); and business services (including temporary help supply services, computer and data processing services, and services to buildings). Service-producing industries are expected to account for approximately 24.5 million of the 26.4 million job growth over the 1992-2005 period.

On the average, employment will grow faster in the major occupational groups that require the most education and training. Service and professional occupations--particularly in the fields of health and education--dominate the lists of occupations gaining the most employment or growing the most rapidly.

Data Limitations

The short lists of rapidly growing occupations and occupations with large numerical growth are extremely selective. They leave out many occupations with favorable employment prospects and relatively high earnings. For example, many engineering specialties, natural science disciplines, and construction crafts fall into this category. For this reason, a great deal of investigation of the projections and other information should take place before career plans are made. Projections of change are not unconditional predictions of the future, but are subject to a variety of influences which may cause a particular industry or occupation to change in a totally unexpected way. Consequently, readers are cautioned to utilize employment outlook information as a guide, rather than a guarantee of job opportunities in any given occupation.

LIST OF SOURCES

Local Data Sources

Johnson County Wage, Salary and Fringe Benefits Report 1994. Johnson County Economic Research Institute in cooperation with the Kansas Department of Human Resources.

Follow-up of JCCC Career Program Completers: Class of 1992-93. Office of Institutional Research, Johnson County Community College. August 1994.

Kansas City Employment Outlook: Projections to 2000. Occupational Information Unit, Missouri Department of Labor & Industrial Relations. December 1992.

Long-Term Follow-up Study of 1989-90 Career Program Completers. Office of Institutional Research, Johnson County Community College. November 1994.

Occupational Compensation Survey: Kansas City, MO-KS Metropolitan Area: July 1993.

Wage Rates in Selected Occupations: Kansas City Metro Area. Research and Analysis Section, Missouri Division of Employment Security. July 1992.

State Data Sources

Kansas Wage Survey: 1992-93 Edition. Kansas Department of Human Resources; Labor Market Information Services. June 1993.

Missouri Employment Outlook: Projections to 2000. Missouri Department of Labor and Industrial Relations. December 1992.

National Data Sources

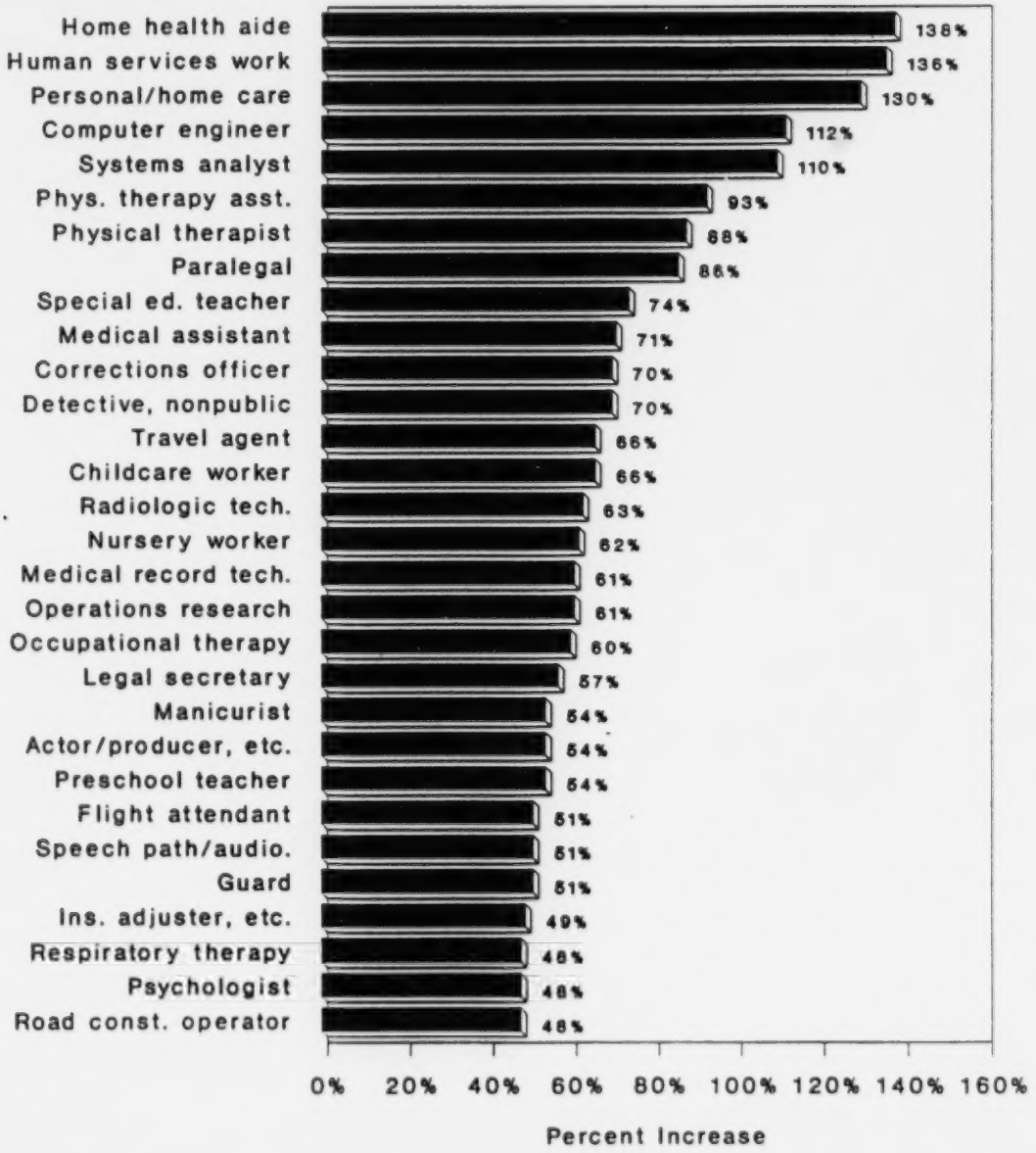
Occupational Outlook Handbook: 1994-95 Edition. U.S. Department of Labor, Bureau of Labor Statistics. May 1994.

Occupational Outlook Quarterly: A Special Issue on the American Work Force, 1992-2005. U.S. Department of Labor, Bureau of Labor Statistics. Fall 1993.

Occupational Projections and Training Data: 1994 Edition. U.S. Department of Labor, Bureau of Labor Statistics. May 1994.

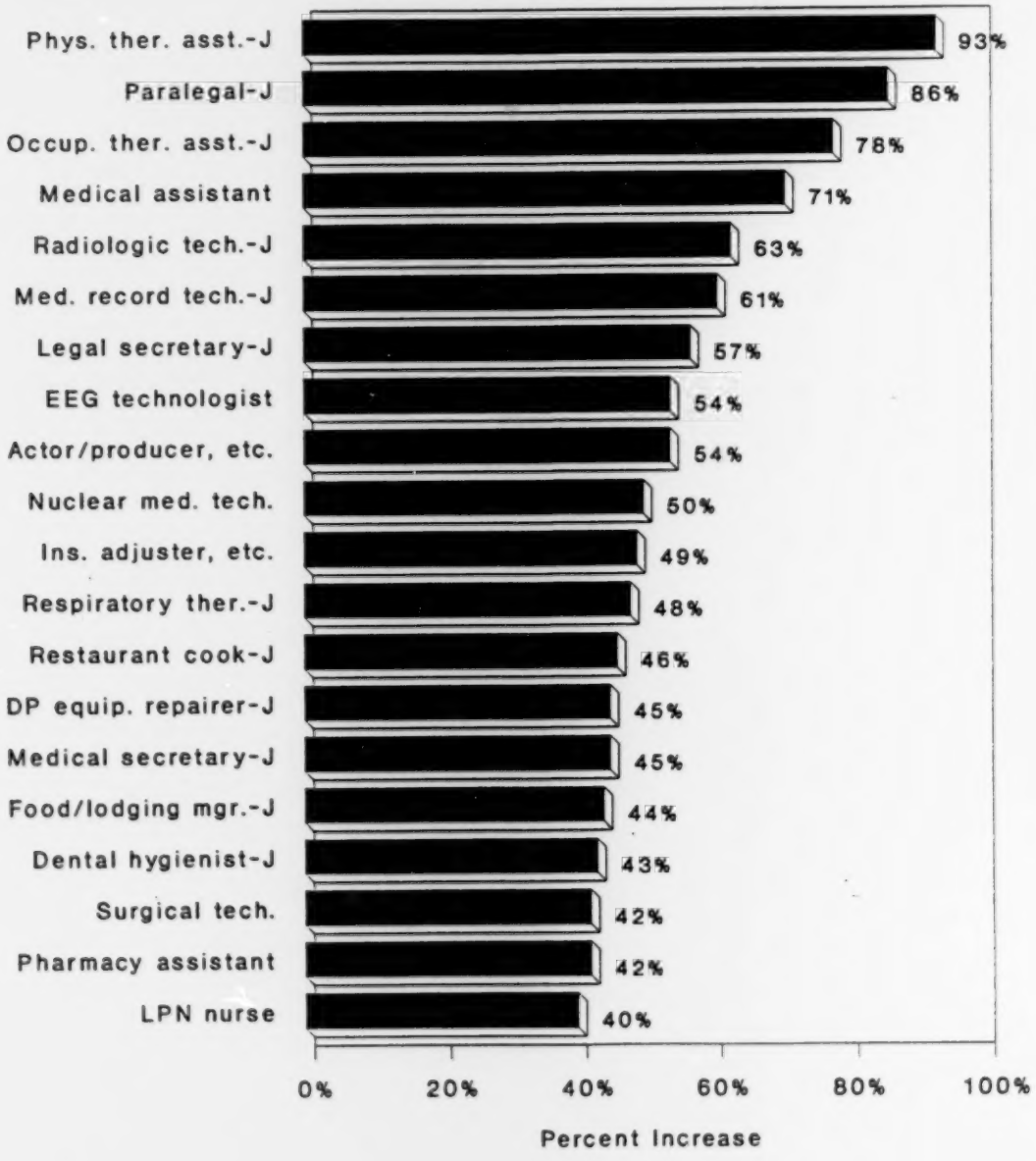
FASTEST GROWING OCCUPATIONS PROJECTED 1992-2005

One-third of the 30 fastest growing occupations are professional occupations. Jobs in these occupations generally require a bachelor's degree or more education. Fields of work having a significant proportion of the fastest growing occupations include computer technology, health service, and personal service. Fast growing occupations generally have good employment prospects and conditions favorable for advancement.



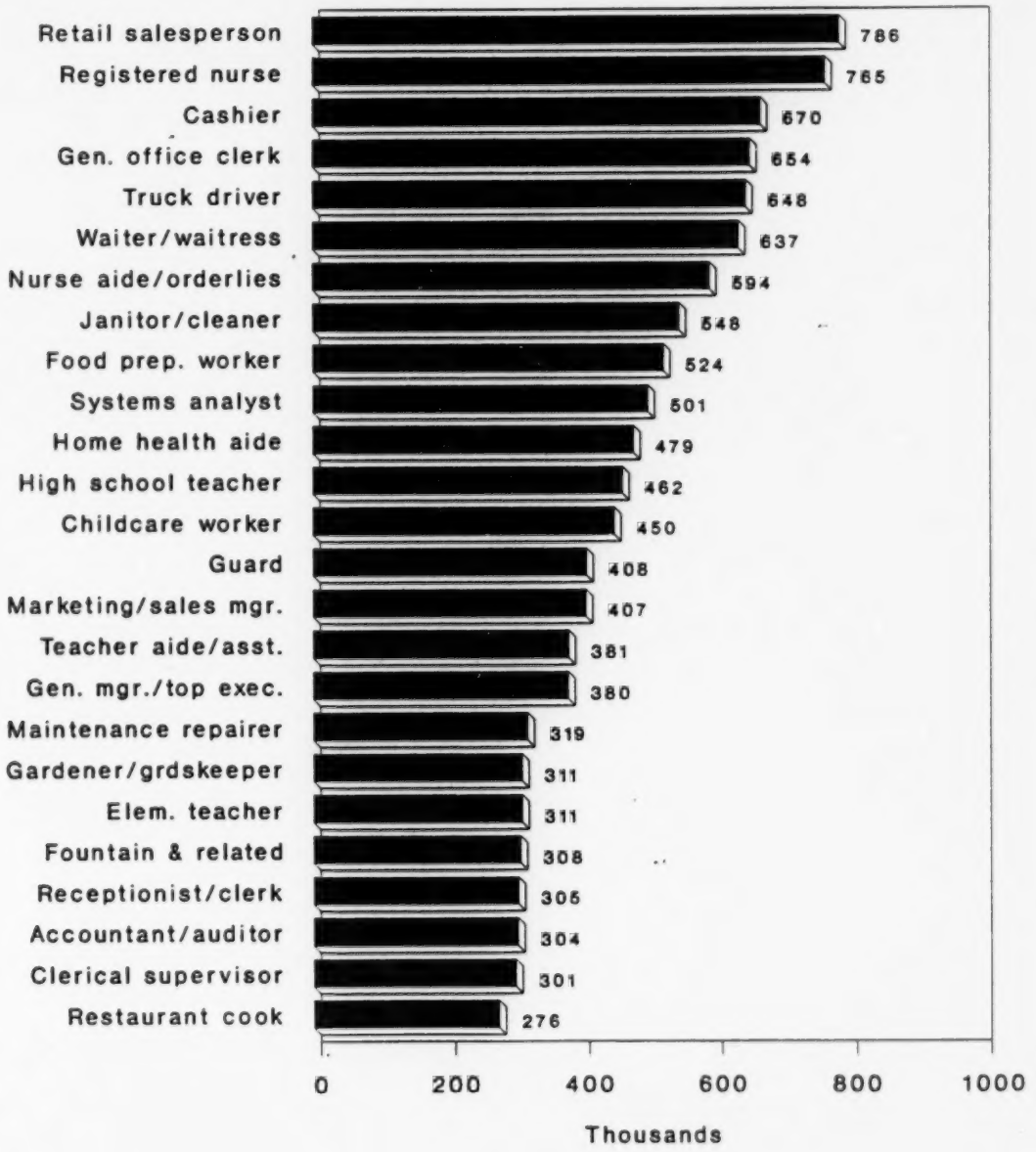
FASTEST GROWING OCCUPATIONS REQUIRING SOME POSTSECONDARY TRAINING, PROJECTED 1992-2005

Health-related occupations account for 13 of the 20 fastest growing occupations requiring some postsecondary training or extensive employer training. These occupations demonstrate a great deal of variety with regard to earnings, number of openings, and skills required. The "J" designates programs offered through Johnson County Community College.



OCCUPATIONS WITH THE LARGEST NUMERICAL INCREASES, PROJECTED 1992-2005

Among the 500 occupations for which projections were developed, these 25 will account for over half of total employment growth over the 1992-2005 period. Johnson County Community College offers career programs in several of these areas. However, the majority of these occupations require little or no formal postsecondary education. Of note is the fact that jobs requiring little or no postsecondary education are traditionally low paying and have an unusually high turnover rate.



ACCOUNTING

Little change is expected in the employment of bookkeeping, accounting, and auditing clerks through 2005. A growing economy will result in more financial transactions and other activities and, therefore, more demand for accounting services. However, automation of office functions is expected to continue, with resulting productivity increases. Virtually all new jobs will be created in small, rapidly growing organizations. Large organizations are likely to continue the consolidation of departments to eliminate duplicate functions and reduce the demand for these clerks.

Employment Information

Greater Kansas City Area: Approximately 15,711 bookkeeping and accounting clerks were employed in the Greater Kansas City area in 1990, with 15,230 jobs projected by the year 2000 (-3.1%). An average of 313 annual openings are anticipated due to the need for replacements.

State: Bookkeeping, accounting and auditing clerks held 46,131 jobs in Missouri in 1990, with 43,970 jobs projected by the year 2000 (-4.7%). Approximately 918 average annual openings are projects due to replacements. Recent data are unavailable for Kansas.

National: Bookkeeping, accounting and auditing clerks held 2,112,000 jobs in 1992, with 2,186,000 jobs projected by the year 2005 (+3.5%). Approximately 342,000 annual openings are anticipated, including replacements.

Salary Information

Johnson County: The average hourly wage for bookkeeping, accounting and auditing clerks was between $8.92 and $10.26 in 1994. The lowest reported wage was under $5.12, the highest was over $20.95, and the median entry-level wage was $7.28 per hour.

State: Bookkeeping, accounting, and auditing clerks in Kansas earned between $7.98 and $9.18 on the average in 1993. The lowest reported wage was under $4.44, the highest was over $20.95, and the average entry-level wage was $6.23 per hour.

National: Bookkeeping, accounting, and auditing clerks earned a median hourly wage of $9.25 in 1990. However, region of the country, size of city, and type and size of establishment all influence salary levels. The level of industry or technical expertise required and the complexity and uniqueness of a clerk's responsibilities may also affect earnings.

JCCC Career Program Completers: An average hourly wage of $11.35 was reported by the 1992-93 accounting program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to accounting.

An average hourly wage of $9.17 was reported by 1989-90 accounting program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

All of the accounting program completers responding to the short-term follow-up of 1992-93 JCCC career program completers were working in a job related to accounting.

Fully 75% of the 1989-90 accounting program completers contacted in 1994 were employed in a job related to accounting, and 25% were working in unrelated jobs.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

ADMINISTRATION OF JUSTICE/LAW ENFORCEMENT

Although employment of police officers, detectives, and special agents is expected to increase more slowly than the average for all occupations through the year 2005, the outlook for law enforcement occupations in general remains positive. Caution should be exercised when interpreting the projected number of jobs in this career field, however, due to uncertainties in the level of government spending for law enforcement in the future. Because of attractive salaries and benefits, the number of qualified candidates generally exceeds the number of job openings, and competition is expected to remain keen for higher paying jobs in larger police departments. Persons having college training in law enforcement should have the best opportunities.

Employment Information

Greater Kansas City Area: A total of 4,473 workers were employed as patrol officers, detectives, supervisors, corrections officers, federal marshalls, criminal investigators, sheriffs, and other law enforcement officers in the Greater Kansas City area in 1990. Approximately 4,904 jobs are projected by the year 2000 (+9.6%), with 170 average annual job openings, including replacements, anticipated. Approximately 545 workers were employed as dispatchers in 1990, with 569 jobs projected by the year 2000 (+4.4%), with 12 average annual openings, including replacements, anticipated.

State: A total of 16,321 workers were employed in law enforcement jobs in Missouri in 1990, with 19,757 jobs projected by the year 2000 (+21.1%). Approximately 791 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Approximately 982,000 individuals were employed in law enforcement occupations in 1992, with 1,271,000 jobs projected by 2005 (+29.4%). An average of 76,000 annual openings are anticipated, including replacements.

Salary Information

Johnson County: The median hourly wage was between $13.76 and $15.92 for police patrol officers and between $15.83 and $18.20 for police detectives in 1994. Average entry-level wages for police patrol officers was $10.36 per hour in the Greater Kansas City area in 1993.

State: The average hourly wages in Kansas were between $10.35 and $11.90 for police patrol officers, between $13.39 and $15.39 for police detectives, and between $14.12 and $16.23 for police and detective supervisors in 1993. Average entry-level wages were $9.22 for patrol officers, $10.10 for detectives, and $10.91 for supervisors.

National: In 1992, the median wage of nonsupervisory police officers and detectives was about $15.40 per hour. The highest paid 10% earned over $51,200 a year, and the lowest paid 10% were paid less than $8.85 an hour. Generally, salaries tend to be higher in larger, more urban jurisdictions that usually have bigger police departments.

Total earnings frequently exceed the stated salary due to payments for overtime, which can be significant, especially during criminal investigations or when police are needed for crowd control during sporting events or political rallies.

JCCC Program Completers: An average hourly wage of $12.69 was reported by 1992-93 police academy graduates responding to the January 1994 short-term follow-up study who were working full-time as police officers. Administration of justice program completers responding to the 1994 short-term follow-up study who were working full-time in a related job also reported average hourly earnings of $12.69.

An average hourly wage of $14.88 was reported by 1989-90 police academy graduates who were working full-time in a related job who responded to the 1994 long-term follow-up study.

JCCC Placement Information

Half of the 1992-93 administration of justice program completers responding to the January 1994 follow-up study were employed in jobs related to administration of justice; 37% were employed in unrelated jobs, 6% were pursuing additional education, and 6% were serving in the military. All of the police academy graduates were employed in jobs related to their police academy training.

Half of the 1989-90 administration of justice program completers responding to the 1994 long-term follow-up study were working in a job related to administration of justice, and half were employed in an unrelated job. All of the police academy graduates responding to the 1994 long-term follow-up study were employed in a related job.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

AUTOMOTIVE BODY REPAIR TECHNOLOGY

Employment of automotive body repairers is expected to increase faster than the average for all occupations through the year 2005. Opportunities should be best for persons with formal training in automotive body repair and mechanics. New automobile designs increasingly have body parts made of steel alloys, aluminum, and plastics--materials that are more difficult to work with than the traditional steel body parts and thus requiring more training. Also, new, lighter weight automotive designs are prone to greater collision damage than older, heavier designs and, consequently, are more time consuming to repair.

The automotive repair business is not very sensitive to changes in economic conditions, and experienced body repairers are rarely laid off. However, most employers hire fewer new workers during an economic slowdown. As a result, persons seeking to enter this occupation may face increased competition for jobs during recessions.

The associate degree in auto body repair is a cooperative program offered through the Johnson County Area Vocational-Technical School and Johnson County Community College.

Employment Information

Greater Kansas City Area: Automotive body and related repairers held 1,736 jobs in 1990, with 2,020 jobs projected by the year 2000 (+16.4%). Approximately 73 average annual openings, including replacements, are anticipated.

State: Automotive body and related repairers held 5,811 jobs in Missouri in 1990, with 6,551 jobs projected by the year 2000 (+12.7%). Approximately 225 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Automotive body and related repairers held 202,000 jobs in 1992, with 263,000 jobs projected by the year 2005 (+30.2%). Approximately 31,000 average annual openings, including replacements, are anticipated.

Salary Information

Johnson County: The median hourly wage for automotive body and related repairers was between $10.39 and $11.95 in 1994. The lowest reported wage was under $5.90, and the highest was over $15.83 per hour.

State: The average hourly wage for automotive body and related repairers in Kansas was between $9.53 and $10.96 in 1993. The lowest reported wage was under $4.44, the highest was over 20.95, and the average entry-level wage was $5.49 per hour.

National: Body repairers earned a median hourly wage of $10.02 in 1992. Helpers and trainees usually earned from 30% to 60% of the earnings of skilled workers. The majority of body repairers employed by automotive dealers and repair shops are paid on an incentive basis. Under this method, body repairers are paid a predetermined amount for various tasks, and earnings depend on the amount of work assigned to the repairer and how fast it is completed. Employers frequently guarantee workers a minimum weekly salary. Helpers and trainees usually receive an hourly rate until they are skilled enough to be paid on an incentive basis.

JCCC Salary and Placement Information

This program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

AUTOMOTIVE TECHNOLOGY

The Bureau of Labor Statistics projects that employment of automotive mechanics will increase about as fast as the average for all occupations through the year 2005, but according to some sources, the nation is already facing a shortage of about 60,000 technicians. The shortage may be attributable to the growing complexity of automobiles. For example, in 1990, just 18% of a new car's functional pieces were controlled by computer. Just four model years later, that has increased to about 83%. Thus, the average technician is considered to be about 6 to 8 years behind in training. The problem is expected to worsen when new Clean Air Act requirements that enhance emissions inspections in many cities take effect in 1995.

Employment Information

Greater Kansas City Area: Automotive mechanics are among the occupations with the largest anticipated job growth in the Greater Kansas City area. Automotive mechanics held 5,186 jobs in the Greater Kansas City area in 1990, with 6,004 jobs projected by the year 2000 (+15.8%). About 233 average annual openings, including replacements, are anticipated.

State: Automotive mechanics held 17,076 jobs in Missouri in 1990, with 19,327 jobs projected by the year 2000 (+13.2%). Approximately 724 average annual openings are projected, including replacements. Recent data are unavailable for Kansas.

National: Automotive mechanics held 739,000 jobs in 1992, with 907,000 jobs projected by the year 2005 (+22.7%). Approximately 123,000 average annual openings, including replacements, are anticipated.

Salary Information

Johnson County: Automotive mechanics earned a median wage of between $13.76 and $15.82 per hour in 1994. The lowest wage was under $5.90, and the highest was over $15.83 per hour. The average entry-level hourly wage for automotive mechanics throughout the Greater Kansas City area was $7.60 in 1993.

State: Automotive mechanics in Kansas earned between 9.78 and $11.24 on the average in 1993. The lowest wage was under $4.44, the highest was over $18.21, and the average entry-level wage was $6.44 per hour.

National: The median hourly wage of automotive mechanics who were wage and salary workers was $10.20 in 1992. The lowest paid 10% earned less than $5.75, and the top 10% earned more than $18.65 per hour. Many experienced mechanics employed by automotive dealers and independent repair shops receive a commission related to the labor cost charged to the customer. Under this method, earnings depend on the amount of work completed by the mechanic.

JCCC Program Completers: An average hourly wage of $9.04 was reported by 1992-93 JCCC automotive technology program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to automotive technology.

An average hourly wage of $19.00 was reported by 1989-90 JCCC automotive technology program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

Approximately 75% of the automotive technology program completers responding to the 1994 short-term follow-up study and 100% of those responding to the 1994 long-term study were working in a job related to automotive technology. The remainder were working in an unrelated job.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

AVIATION MAINTENANCE TECHNOLOGY

The number of aircraft mechanics is expected to increase slower than the average for all occupations through the year 2005. A growing population and rising incomes are expected to stimulate the demand for airline transportation, and the number of aircraft is expected to grow. However, employment growth will be restricted somewhat by increases in productivity resulting from greater use of automated inventory control and modular systems that speed repairs and parts replacement.

Job opportunities are likely to be best in general aviation. Since wages in small companies tend to be relatively low, there generally are fewer applicants for these jobs than for airline jobs. Mechanics who keep abreast of technological advances in electronics, composite materials, and other areas will be in greatest demand.

Employment Information

Greater Kansas City Area: Aircraft mechanics and engine specialists held 2,380 jobs in the Greater Kansas City area in 1990. Approximately 2,036 jobs are projected by the year 2000 (-14.5%), with an average of 55 annual openings due to replacements anticipated.

State: Aircraft mechanics and engine specialists held 5,423 jobs in Missouri in 1990, with 5,062 jobs projected by the year 2000 (-6.7%). Approximately 121 average annual openings are anticipated due to replacements. Recent data are unavailable for Kansas.

National: Aircraft mechanics and engine specialists held about 131,000 jobs nationwide in 1992, with approximately 148,000 jobs anticipated by the year 2005 (+12.7%). Approximately 8,000 average annual openings, including replacements, are anticipated.

Salary Information

State: The average annual salary for aircraft mechanics in Kansas was between $24,398 and $28,059 in 1993. The lowest salary reported was under $14,144, and the highest was over $32,926 per year.

National: In 1992, the median annual salary of aircraft mechanics was about $32,500. The top 10% of all aircraft mechanics earned over $47,500 a year and the bottom 10% earned less than $17,700. Mechanics who worked on jets generally earned more than

those working on other aircraft, and earnings of airline mechanics generally were higher than mechanics working for other employers.

JCCC Program Completers: Salaries of respondents to recent short-term follow-up studies of aviation maintenance technology completers varied considerably, from $10,400 to $31,200 per year. An average annual wage of $26,000 was reported by aviation maintenance program completers who responded to the 1994 follow-up study of 1992-93 career program completers.

Caution should be exercised in interpreting these data due to the small number of respondents from this program.

JCCC Placement Information

Of the JCCC aviation maintenance technology completers responding to recent follow-up studies, 50% were employed in a job related to aviation maintenance and the remainder were employed in unrelated jobs. However, because aviation maintenance technology is a program offered in cooperation with Maple Woods Community College, the data on JCCC aviation maintenance technology completers are limited and thus may not accurately reflect placement possibilities in this career field.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

CARPENTRY TECHNOLOGY

Employment of carpenters is expected to increase about as fast as the average for all occupations through the year 2005. Construction activity should increase in response to demand for new housing and commercial and industrial plants and the need to renovate and modernize existing structures.

The introduction of new and improved tools, equipment, techniques, and materials has vastly increased carpenters' versatility. Therefore, carpenters with all-round skills will have better opportunities than those who can only do relatively simple, routine tasks. Job opportunities for carpenters also vary by geographic area, and people entering the occupation should expect to experience periods of unemployment resulting from the short-term nature of many construction projects and the cyclical nature of the construction industry..

The associate degree in carpentry is a cooperative program offered through the Johnson County Area Vocational-Technical School and Johnson County Community College.

Employment Information

Greater Kansas City Area: Carpenters are among the occupations with the largest anticipated job growth in the Greater Kansas City area. Carpenters held 5,635 jobs in the Greater Kansas City Area in 1990, with 6,612 jobs projected by the year 2000 (+17.3%). Approximately 196 average annual openings, including replacements, are anticipated.

State: Carpenters held 23,184 jobs in Missouri in 1990, with 26,357 jobs projected by the year 2000 (+13.7%). Approximately 718 average annual openings are anticipated, including replacements. No recent data are available for the State of Kansas.

National: Carpenters held 978,000 jobs nationwide in 1992, with 1,176,000 jobs projected by the year 2005 (+20.2%). Approximately 182,000 average annual openings, including replacements, are anticipated.

Salary Information

Johnson County: The median hourly wage for carpenters was between $13.76 and $15.82 in 1994. The lowest wage reported was under $5.90, the highest was over $27.73, and the average entry-level wage was $9.00 per hour.

State: The average hourly wage for carpenters in Kansas was between $10.12 and $11.64 in 1993. The lowest wage reported was under $5.12, the highest was over $27.73, and the average entry-level wage was $7.57 per hour.

National: The median hourly wage of carpenters who were not self-employed was $10.63 in 1992. The middle 50% earned between $8.00 and $14.63. The lowest 10% earned less than $6.36 and the top 10% earned more than $19.25 per hour.

Note. Earnings may be reduced on occasion because carpenters lose work time in bad weather and when jobs are unavailable.

JCCC Salary and Employment Information

This program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

CHEF APPRENTICE

Job openings for chefs, cooks, and other kitchen workers are expected to be excellent through the year 2005. Since a significant proportion of food and beverage sales by eating and drinking establishments is associated with the overall level of economic activity--workers' lunches and entertainment of clients, for example--sales and employment will increase with the growth of the economy. Other factors contributing to employment growth will be population growth, rising family and personal incomes, and more leisure time that will allow people to dine out and take vacations more often.

Certification provides valuable formal recognition of the skills of a chef or cook. The chef apprenticeship program at JCCC is sponsored by the American Culinary Federation Educational Institute and the U.S. Department of Labor. Students must successfully complete all entry-level examinations as prescribed by the Apprenticeship Committee of the American Culinary Federation Education Institute.

Employment Information

Greater Kansas City Area: Approximately 5,118 restaurant cooks were employed in the Greater Kansas City area in 1990, and 6,228 jobs are projected by the year 2000 (+21.7%). About 240 average annual openings are anticipated, including replacements. Restaurant cooks are among the occupations with the largest anticipated job growth in the Greater Kansas City area.

State: Restaurant cooks held 16,221 jobs in Missouri in 1990, with 19,379 jobs projected by the year 2000 (+19.5%). Approximately 725 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Restaurant cooks held approximately 602,000 jobs in 1992, with 879,000 jobs projected by the year 2005 (+45.8%). Approximately 228,000 average annual openings, including replacements, are anticipated. Restaurant cooks are listed among both the fastest growing and occupations with the largest projected numerical increases to the year 2005.

Salary Information

JCCC Career Program Completers: An average annual salary of $21,154 was reported by the 1992-93 JCCC chef apprentice program completers responding to the January 1994 short-term follow-up study who had been employed for one year or less in a full-time related job.

An average annual salary of $28,517 was reported by the 1989-90 JCCC chef apprentice program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

Johnson County: The median annual salary for restaurant cooks was between $12,300 and $14,100 in 1994. The lowest reported salary was less than $8,300 and the highest was more than $57,678.

Greater Kansas City Area: Salaries for chefs ranged from $13,000 to $58,000 in the Greater Kansas City area in 1991 depending on the place of employment and the nature of the work. For example, employers reported salaries for banquet chefs ranging from $23,000 to $28,000 at some locations, and from $29,000 to $42,000 at others. Salaries for executive chefs ranged from $16,000 to $20,000 at some locations, and from $38,600 to $58,000 at others. Salaries for pastry chefs ranged from $20,000 to $24,000 at some locations, and from $32,000 to $42,000 at others. Coffee shop chef salaries ranged from $13,000 to $19,200 at some locations, and from $25,000 to $38,000 at others. Source: Hotel and Motel Association of Greater Kansas City.

State: The average entry-level salary for restaurant cooks in Kansas was under $10,000 in 1993, and the average salary for all restaurant cooks was under $13,000. However, the range was very broad depending on the place of employment and the nature of the work. The lowest salary reported was approximately $8,000, and the highest was over $57,000.

National: Wages are generally highest in elegant restaurants and hotels, and many executive chefs earned over $40,000 annually. According to a 1992 survey conducted by the National Restaurant Association, median annual earnings of cooks were $13,666, and bread and pastry bakers earned a median salary of $13,000.

JCCC Placement Information

Nearly 90% of the chef apprentice program completers responding to the 1994 short-term follow-up of the Class of 1992-93. Approximately 6% were employed in unrelated jobs, and the remainder were pursuing additional education. All of the respondents to the 1994 long-term follow-up study of the Class of 1989-90 were working in related jobs.

Note. **Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers. Caution should also be exercised when interpreting local, state and national salary data as these data do not differentiate between salaries of postsecondary chef apprentice career program completers and wages earned by less qualified cooks.**

CIVIL ENGINEERING TECHNOLOGY

Well-qualified engineering technicians should experience good employment opportunities through the year 2005. Employment is expected to increase faster than the average for all occupations due to anticipated increases in research and development expenditures and expected continued rapid growth in the output of technical products. Employment of engineering technicians is influenced by local and national economic conditions, however, and civil engineering technicians usually experience greater cyclical fluctuations than other types of engineering technicians. Technicians whose jobs are defense related may experience fewer opportunities because of defense cutbacks.

Although it is possible to qualify for engineering technician jobs through many combinations of work experience and education, most employers prefer to hire someone who will require less on-the-job training and supervision.

Employment Information

Greater Kansas City Area: Civil engineering technicians held 338 jobs in the Greater Kansas City area in 1990. Approximately 372 jobs are projected by the year 2000 (+10.1%), with 12 average annual openings, including replacements, anticipated.

State: Civil engineering technicians held 1,585 jobs in Missouri in 1990, with 1,483 jobs projected by the year 2000 (-6.4%). Approximately 42 average annual openings are projected due to replacements. Recent data are unavailable for the State of Kansas.

National: Engineering technicians held approximately 695,000 jobs in 1992. Over 827,000 jobs are projected by the year 2005 (+19.0%), with 85,000 average annual openings, including replacements, anticipated.

Salary Information

Greater Kansas City Area: Civil engineering technicians and technologists in Johnson, Leavenworth, Miami, and Wyandotte Counties earned a median annual salary ranging from $32,926 to $37,856 in 1994. The lowest reported salary was under $18,762, and the highest was over $66,000 per year.

State: The wages for civil engineering technicians and technologists in Kansas were identical to those for the Greater Kansas City area stated above.

National: Engineering technicians at the most junior level had median earnings of about $20,900 in 1992, with the middle half earning between $18.900 and $22,600 a year. Engineering technicians with more experience and the ability to work with little supervision had median earnings of about $28,800, and those in supervisory or senior level positions earned about $41,400. In the federal government, engineering technicians start at about $14,600 to $18,300, depending on their education and experience.

JCCC Career Program Completers: Civil engineering technology program completers responding to the January 1994 short-term follow-up of 1992-93 career program completers who were employed full-time in a related job reported an average annual salary of $20,197. Males earned an average of $19,344, and females earned an average of $21,070.

JCCC Placement Information

All of the respondents to the last three short-term follow-up studies who had completed the civil engineering technology program were working in related jobs.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

COMMERCIAL ART

Employment of visual artists overall is expected to grow about as fast as average for all occupations through the year 2005. Demand for the work of graphic artists will be strong as producers of information, goods, and services put even more emphasis on visual appeal in product design, advertising, marketing, and television.

Despite expected faster than average employment growth, the supply of those seeking entry to this field will continue to exceed requirements. Nonetheless, graphic arts studios, clients, and galleries alike are always on the lookout for artists who display outstanding talent, creativity, and style. Talented artists who have developed a mastery of artistic techniques and skills, and in many cases computer skills, should continue to be in great demand.

Employment Information

Greater Kansas City Area: Artists and related workers held 3,054 jobs in the Greater Kansas City area in 1990. Approximately 3,558 jobs are projected by the year 2000 (+16.5%), with 108 average annual openings anticipated, including replacements.

State: artists and commercial artists held 7,925 jobs in Missouri in 1990, with 9,331 jobs projected by the year 2000 (+17.7%). Approximately 292 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: About 273,000 artists and commercial artists were employed nationwide in 1992, with 333,000 jobs projected by the year 2005 (+22.9%). Approximately 46,000 average annual openings, including replacements, are anticipated.

Salary Information

Greater Kansas City Area: Artists and related workers in Johnson, Leavenworth, Miami and Wyandotte Counties earned a median salary between $18,782 and 21,590 in 1991, 1993, and 1994. The lowest reported salary was under $14,000 and the highest was over $57,678 per year.

State: The median annual salary for artists and related workers in Kansas was between $16,307 and $18,762 in both 1991 and 1993. The lowest reported salary was under $10,650, the highest was over $57,678, and the average entry-level salary was $14,789 per year.

National: The median annual salary for visual artists who usually work full-time was about $23,000 in 1992. The middle 50% earned between $17,600 and $30.800 per year. The top 10% earned more than $43,500, and the bottom 10% earned less than $14,600.

JCCC Career Program Completers: An average annual salary of $16,889 was reported by 1992-93 JCCC commercial art program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to commercial art. Males earned an average salary of $17,306 and females averaged $16,661 per year. The majority had been working in their current job for one year or less.

An average annual salary of $24,170 was reported by 1989-90 JCCC commercial art program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994. Males reported an average annual salary of $26,208 and females averaged $23,338 per year.

JCCC Placement Information

Approximately 75% of the 1992-93 commercial art program completers responding to the January 1994 short-term follow-up study were employed in a job related to commercial art; 6% were working in unrelated jobs, 6% were serving in the military, and 12% were pursuing additional education.

Fully 80% of the 1989-90 commercial art program completers contacted in 1994 were employed in jobs related to commercial art; 10% were employed in unrelated jobs, and the remainder were unemployed and looking for work.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

CONSTRUCTION MANAGEMENT

Employment of construction contractors and managers is expected to increase much faster than the average for all occupations through the year 2005 as the number and complexity of construction projects continues to grow. Increased spending on the nation's infrastructure--highways, bridges, dams, schools, subways, airports, water and sewage systems, and electric power generation and transmission facilities--will be the primary stimulus to the demand for construction contractors and managers. Additional jobs will be created by growth in less rapidly expanding construction activities as well. The need to build more residential housing, commercial and office buildings, and factories, as well as maintenance and repair of all kinds of existing structures will stimulate further demand for these workers.

Prospects are expected to be particularly favorable for experienced construction managers with a bachelor's degree (or higher) in construction science with emphasis on construction management.

Employment Information

Greater Kansas City Area: About 1,521 first line construction supervisors were employed in the Greater Kansas City area in 1990, with 1,650 jobs projected by the year 2000 (+8.5%). Approximately 45 average annual openings, including replacements, are anticipated.

State: Construction managers held 3,770 jobs in Missouri in 1990, with 4,630 jobs projected by the year 2000. Approximately 141 average annual openings, including replacements, are anticipated. Recent data are unavailable for the State of Kansas.

National: Over 180,000 construction managers were employed nationwide in 1992, with 264,000 jobs projected by the year 2005 (+47.0%). Approximately 23,000 average annual openings, including replacements, are anticipated.

Salary Information

Johnson County: The median annual salary for construction managers was between $32,926 and $37.856 in 1994. The lowest salary reported was under $18,762 and the highest was over $66,331 per year.

State: The average annual salary for first-line supervisors and managers for the construction trades in Kansas was between $31,450 and $36,171 per year. The lowest salary reported was under $16,286 and the highest was over $76,294 per year.

National: Earnings of salaried construction managers and incomes of self-employed contractors vary depending upon the size and nature of the construction project, its geographic location, and economic conditions. Based on limited information, starting salaries of construction managers in 1992 were about $32,000; annual earnings of most experienced managers ranged from $35,000 to $110,000.

The income of self-employed contractors varies even more widely than that of salaried managers. The failure rate of small, newly formed construction firms is higher than that of other newly established small businesses.

JCCC Salary and Placement Information

This program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

DATA PROCESSING

Employment of programmers is expected to grow faster than the average for all occupations through the year 2005 as computer usage expands. However, employment is not expected to grow as rapidly as in the past as improved software and programming techniques, including CASE and 4GL, simplify or eliminate some programming tasks. One important area of progress will be data communications. Networking computers so they can communicate with each other is necessary to achieve the greater efficiency that organizations require to remain competitive. Employers are increasingly interested in workers who can apply CASE tool programming along with design and systems analysis to produce applications quickly and more cheaply. People who want to become programmers can enhance their chances by combining work experience with appropriate formal training.

Employment Information

Greater Kansas City Area: Computer programmers and programmer aides are among the fastest growing occupations and among those projected to have the largest job growth in the Greater Kansas City area by the year 2000. Computer programmers and programmer aides held 4,041 jobs in 1990. Approximately 5,364 jobs are projected by the year 2000 (+32.7%), with 219 average annual openings anticipated, including replacements.

State: Computer programmers held 8,179 jobs in Missouri in 1990, with 10,269 jobs projected by the year 2000 (+25.6%). Approximately 383 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Computer programmers held 555,000 jobs in 1992, with 723,000 jobs projected through the year 2005 (+30.4%). Approximately 73,000 average annual openings, including replacements, are anticipated. Computer programmers are listed among both the fastest growing occupations and those with the largest projected numerical increases to the year 2005.

Salary Information

Greater Kansas City Area: The average annual salary for computer programmers throughout the Greater Kansas City area was $29,016, and the average in Johnson, Leavenworth, Miami and Wyandotte Counties was between $35,089 and $40,352 in

1993. The lowest salary reported on the Kansas side was under $16,286, the highest was over $66,331, and the average entry-level salary was $24,918 per year. The average annual salary for computer programmer aides in Johnson, Leavenworth, Miami and Wyandotte Counties was between $24,357 and $28,018. The lowest salary reported was under $16,286 and the highest was over $32,926 per year.

State: The median annual salary for computer programmers in Kansas was between $37,877 and $43,555 in 1994. The lowest reported salary for computer programmers was under $16,286, the highest was over $66,331, and the median entry-level salary was $24,627 per year. Computer programmer aides earned a median salary of between $24,877 and $28,600 in 1994. The lowest reported salary for computer programmer aides was under $16,286, the highest was over $32,926 per year.

National: Median earnings of programmers who worked full-time in 1992 were about $35,600 per year. The lowest 10% earned less than $19,700, and the highest 10% earned more than $58,000. On the average, systems programmers earn more than applications programmers.

JCCC Career Program Completers: An average annual salary of $29,037 was reported by 1992-93 JCCC data processing program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to data processing. Males reported an average annual salary of $30,638 compared to $25,792 reported by females. Respondents employed in their current full-time related job one year or less reported average annual earnings of $23,296. An average annual salary of $40,019 was reported by 1989-90 JCCC data processing program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994. Male completers responding to the study reported average earnings of $41,454 compared to $38,397 reported by female respondents.

JCCC Placement Information

Nearly 74% of the 1992-93 data processing program completers responding to the January 1994 short-term follow-up study were working in a job related to data processing; 11% were pursuing additional education, 8% were employed in an unrelated job, 2% were serving in the military, and 5% were unemployed and looking for work. Fully 80% of the 1989-90 data processing program completers contacted in 1994 were employed in a related job; 12% were working in an unrelated job, 4% were unemployed and looking for work, and 4% were out of the labor force.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

DENTAL HYGIENE

Employment of dental hygienists is expected to grow much faster than the average for all occupations through the year 2005 in response to increasing demand for dental care. Demand will be stimulated by population growth, greater retention of natural teeth by middle-aged and elderly people, rising real incomes, and greater availability of dental insurance.

Enrollments in dental hygiene programs have been on the rise recently after declining during the 1980's. Unless the number increases sharply, however, opportunities are expected to remain very good. Completion of an associate degree program is sufficient for practice in a private dental office. A bachelor's or master's degree is usually required for positions that involve research, teaching, or clinical practice in public or school health programs.

Employment Information

Greater Kansas City Area: Dental hygienists are listed among the fastest growing occupations in the Greater Kansas City area to the year 2000. Dental hygienists held 542 jobs in the Greater Kansas City area in 1990. Approximately 772 jobs are projected through the year 2000 (+42.4%), with 32 average annual openings, including replacements, anticipated.

State: Dental hygienists held 1,651 jobs in Missouri in 1990, with 2,331 jobs projected by the year 2000. Approximately 95 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Dental hygienists held about 108,000 jobs in 1992, with 154,000 jobs projected by the year 2005 (+42.7%). Approximately 15,000 average annual openings, including replacements, are anticipated.

Salary Information

National: A recent survey of dental hygienists indicated the average hygienist works 28 hours a week to earn $37,610 per year. She has at least 15 years experience, and sees 8 to 10 patients daily. Full-time hygienists with less than 5 years of experience earned an average annual salary of $40,435 in 1993. Approximately 72% of hygienists are paid on a salary basis, while a much smaller number is paid with bonuses and/or commissions. Source: RDH, 7/93.

JCCC Career Program Completers: An average annual salary of $38,730 was reported by 1992-93 JCCC dental hygiene program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to dental hygiene. An average annual salary of $37,398 was reported by 1989-90 JCCC dental hygiene program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

All of the dental hygiene program completers responding to the 1994 short-term follow-up study and 86% of those responding to the long-term follow-up were working in a job related to dental hygiene. The remaining 14% of 1989-90 dental hygiene completers responding to the 1994 follow-up study were employed in unrelated jobs.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

DRAFTING TECHNOLOGY

Employment of drafters is expected to grow more slowly than the average for all occupations through the year 2005. Industrial growth and the increasingly complex design problems associated with new products and processes will greatly increase the demand for drafting services. However, greater use of CAD equipment--which increases drafters' productivity--is expected to offset some of this growth in demand. Nevertheless, the ease of obtaining computer-generated information is expected to stimulate demand for more information, so there will continue to be growth in the occupation.

Individuals who have at least 2 years of training in a technically strong drafting program and who have experience with CAD systems will have the best opportunities.

Employment Information

Greater Kansas City Area: Drafters held 2,849 jobs in the Greater Kansas City area in 1990. Approximately 3,107 jobs are projected by the year 2000 (+9.1%), with 127 average annual openings, including replacements, anticipated.

State: Drafters held 6,443 jobs in Missouri in 1990, with 6,706 jobs projected by the year 2000 (+4.1%). Approximately 254 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Drafters held about 314,000 jobs in 1992, with 350,000 jobs projected by the year 2005 (+11.3%). Approximately 52,000 average annual openings, including replacements, are anticipated.

Salary Information

Johnson County: The median hourly wage for drafters in Johnson County was between $11,96 and /$13.75 in 1994. The lowest reported wage was under $6.80, the highest was over $24.10, and the median reported entry-level wage was $8.86 per hour.

State: The average hourly wage for drafters in Kansas was between $11.56 and $13.20 per hour in 1993. The lowest wage reported was under $5.90, and the highest was over $24.10 per hour. The average entry-level wage for drafters in Kansas was $8.30 per hour

in 1993. The lowest entry-level wage reported was under $5.70, and the highest was over $10.00 per hour.

National: Median hourly earnings of drafters who worked year round, full-time were about $13.17 in 1992. The middle 50% earned between $9.90 and $16.88 per hour; the top 10% earned more than $20.90 per hour and the bottom 10% earned less than $7.64. According to a survey of workplaces in 260 metropolitan areas, experienced drafters had median earnings of about $14.50 in 1992, with the middle half earning between $13.00 and $16.35 per hour.

JCCC Career Program Completers: An average hourly wage of $10.64 was reported by respondents to the short-term follow-up of 1992-93 JCCC drafting program completers conducted in January 1994. Females reported average hourly wages of $9.00, and males averaged $10.97 per hour. An average hourly wage of $9.57 was reported by respondents employed one year or less in a full-time related job.

An average hourly wage of $8.50 was reported by the one 1989-90 JCCC drafting program completer working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

Two out of three respondents to the 1994 short-term follow-up of 1992-93 drafting program completers were working in a job related to drafting; 11% were employed in an unrelated job, 11% were serving in the military, and 11% were unemployed and looking for work.

All of the 1989-90 drafting program completers contacted in 1994 were employed in a job related to drafting.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

ELECTRONICS ENGINEERING TECHNOLOGY

Well-qualified engineering technicians should experience very good employment opportunities through the year 2005. Employment is expected to increase as fast as the average for all occupations due to expected continued rapid growth in the output of technical products. However, like engineers, employment of engineering technicians is influenced by local and national economic conditions. The employment outlook also varies with the area of specialization and industry. Technicians whose jobs are defense related may be laid off in times of defense cutbacks.

Employment Information

Greater Kansas City Area: Electrical/electronics and related technicians held 2,652 jobs in the Greater Kansas City area in 1990. Approximately 3,373 jobs are projected by the year 2000 (+27.2%), with 100 average annual openings, including replacements, anticipated.

State: Electrical and electronics technicians held 5,211 jobs in Missouri in 1990, with 6,035 jobs projected by the year 2000 (+15.8%) Approximately 139 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Electrical and electronics technicians held about 323,000 jobs in 1992, with 396,000 jobs projected by the year 2005 (+22.8%). Approximately 36,000 average annual openings, including replacements, are anticipated.

Salary Information

Johnson County: The median hourly wage for electronics technicians in Johnson County was between $15.83 and $18.20 in 1994. The lowest reported wage was under $6.80, and the highest was over $27.73 per hour.

State: The average hourly wage for electronics and data processing equipment repairers in Kansas was between $10.33 and $13.42 in 1993. The lowest reported wage was under $5.90, and the highest was over $20.95 per hour.

National: Engineering technicians at the most junior level had median earnings of about $10.00 per hour in 1992, with the middle half earnings between $9.00 and $10.86 per

hour. In the federal government in 1993, the average annual salary for electronics technicians in supervisory, nonsupervisory, and management positions was $20.40 per hour. Engineering technicians were offered a starting salary of between $6.50 and $8.16 an hour by the federal government, depending on their education and experience.

JCCC Career Program Completers These data combine findings for completers of computer systems technology, biomedical equipment technology, and electronics engineering technology:

An average hourly wage of $12.25 was reported by 1992-93 electronics engineering technology program completers responding to the January 1994 short-term follow-up study who were employed in a full-time related job.

An average hourly wage of $15.01 was reported by 1989-90 JCCC electronics engineering program completers who were working full-time in a job related to their JCCC career program who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

These data combine findings for completers of computer systems technology, biomedical equipment technology, and electronics engineering technology:

Nearly 71% of respondents to the 1994 short-term follow-up study of 1992-93 completers were employed in a job related to their JCCC career program, 12% were working in an unrelated job and 17% were pursuing additional education.

Approximately 70% of the 1989-90 electronics engineering technology program completers contacted in 1994 were employed in a job related to their JCCC career program, 20% were working in an unrelated job and 10% were unemployed and looking for work.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

EMERGENCY MEDICAL SCIENCE:
EMERGENCY MEDICAL TECHNOLOGY/EMT (BASIC)
MOBILE INTENSIVE CARE TECHNOLOGY/MICT (PARAMEDIC)

Employment of emergency medical technicians and paramedics is expected to grow about as fast as the average for all occupations through the year 2005. Opportunities for EMT's are expected to be excellent in hospitals and private ambulance services, where pay and benefits usually are low. Competition for jobs will be keen in fire, police, and rescue squad departments because of attractive pay and benefits and good job security. While new job openings will result from expansion of emergency medical services, most openings will occur because of this occupation's substantial replacement needs. Turnover is quite high, reflecting this occupation's high-stress working conditions, limited advancement potential, and the modest pay and benefits in the private sector.

Employment Information

Greater Kansas City Area: Emergency medical technicians held 1,533 jobs in the Greater Kansas City area in 1990. Approximately 1,677 jobs are projected by the year 2000 (+9.4%), with 25 average annual openings, including replacements, anticipated.

State: Emergency medical technicians held 4,775 jobs in Missouri in 1990, with 5,590 jobs projected by the year 2000 (+17.1%). Approximately 117 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Approximately 114,000 emergency medical technicians were employed nationwide in 1992, with 155,000 jobs projected by the year 2005 (+35.9%). About 15,000 average annual openings, including replacements, are anticipated.

Salary Information

Greater Kansas City Area: The average annual salary for emergency medical technicians in Johnson, Leavenworth, Miami and Wyandotte Counties was between $14,456 and $16,619 in 1993. The lowest reported salary was under $12,272 and the highest was over $21,611 per year.

State: The average salary for emergency medical technicians in Kansas was between $16,411 and $18,866 in 1993. The lowest reported salary was under $10,650, the highest was over $32,926, and the average entry-level salary was $14,560 per year.

Regional: Average 1993 annual salaries within the 12 state area comprising the Central United States were: EMT-Basic, $23,045; EMT-Intermediate, $21,206, and Paramedic, $26,675. Source: Journal of Emergency Medical Services, , pp.76-91.

National: Results of the 1993 survey indicated a decrease in the overall mean salaries of emergency services personnel, the first decline reported in the 6 years the study has been conducted for the Journal of Emergency Medical Services. EMT-basic personnel reported an average annual salary of $22,848 (entry-level = $20,093), EMT-intermediate personnel averaged $22,682 (entry-level = $19,530), and paramedics averaged $28,079 (entry-level = $24,390). Reported salaries ranged from $11,120 to $38,000 for EMT-basic personnel, from $15,766 to $37,446 for EMT-intermediate personnel, and from $18,000 to $44,426 for paramedics.

JCCC Career Program Completers: Average annual salaries of $16,099 for EMT completers and $21,694 for MICT (paramedic) completers working full-time in a related job were reported by respondents to the January 1994 short-term follow-up of 1992-93 career program completers. Male paramedics reported average earnings of $20,426 compared to $23,483 reported by females, and male EMTs reported average earnings of $15,246 compared to $21,174 reported by females (the reverse of findings for male vs. female completers responding to the 1994 long-term follow-up study--see below).

An average annual salary of $23,296 for EMT's and $24,627 for MICT's was reported by 1989-90 completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994. Male paramedics averaged $25,522 vs. $21,986 reported by females, and male EMT's averaged $24,648 vs. $19,698 for females.

JCCC Placement Information

Approximately 56% of the EMT and 87% of the MICT program completers responding to the January 1994 short-term follow-up study were working in a job related to emergency medical technology. The remainder were either employed in an unrelated job or pursuing additional education. Only 2% were unemployed and looking for work.

Approximately 68% of the 1989-90 EMT completers and all of the MICT completers responding to the long-term follow-up study conducted in 1994 were working in a related job. The remainder were employed in a job unrelated to emergency medical technology.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative all career program completers.

Skills and training requirements for EMT-basic, EMT-intermediate, and paramedic positions are available from the JCCC Office of Institutional Research (COM 305) or from the director for the Medical Intensive Care Technology program (SCI 110).

FASHION MERCHANDISING

(Note. Since no separate occupational category was detailed for fashion merchandising in available sources, employment and salary information is provided for related occupations for which completers of this program qualify.) Employment of purchasers and buyers is expected to increase more slowly than the average for all occupations through the year 2005. Over the past few years, the organizational structure of the wholesale and retail trade industries has been changing. Many firms have purchased or merged with other firms. When functions are centralized by the new organization, fewer buyers and managers are needed. Buyers, especially those who buy items such as apparel which are affected by shifting consumer preferences, have less job security than people in many other occupations. Buyers who buy items that don't sell well are often fired.

Fashion merchandising program completers will always find ample employment opportunities as retail salespersons and have better opportunities for advancement than nonprogram completers. Employment of retail salespersons is expected to increase about as fast as the average for all workers through the year 2005. As in the past, replacement needs will generate an exceptionally large number of sales jobs because the occupation is large and turnover is much higher than the average.

Employment Information

Greater Kansas City Area: Wholesale and retail buyers held 1,480 jobs in the Greater Kansas City area in 1990. Approximately 1,703 jobs are projected by the year 2000 (+15.1%), with 50 average annual openings, including replacements, anticipated.

Retail sales is again among the 40 occupations with the largest anticipated job growth in the Greater Kansas City area. Salespersons held 25,165 jobs in the Greater Kansas City area in 1990. Approximately 27,880 jobs are projected by the year 2000 (+10.8%). First line sales supervisors held 13,569 jobs in 1990, with 15,234 jobs projected by the year 2000 (+12.3%). Approximately 379 average annual supervisory openings and 1,165 average annual retail sales openings, including replacements, are anticipated.

State: Wholesale and retail buyers held 3,962 jobs in Missouri in 1990, with 4,345 jobs projected by the year 2000 (+9.7%). approximately 113 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Purchasing managers held about 221,000 jobs in 1992, with 252,000 jobs projected by the year 2005 (+13.9%). Approximately 13,000 average annual job openings, including replacements, are projected. Retail sales workers held 3.7 million jobs in 1992, with 4.4 million jobs projected by the year 2005 (+21.5%).

Salary Information

Greater Kansas City Area: In 1993, wholesale and retail buyers in Johnson, Leavenworth, Miami and Wyandotte Counties earned an average hourly wage of between $13.65 and $15.69. The lowest wage reported was under $6.80, and the highest was over $27.73 per hour. First-line sales supervisors earned an average wage of $15.03, with a median entry-level wage of $7.10 per hour.

State: The average wage for buyers in Kansas was between $11.99 and $13.79 in 1993. The lowest reported wage was under $4.44, and the highest was over $31.89. First-line sales supervisors earned an average hourly wage of $12.75 per hour in 1993. The lowest wage reported for first-line sales supervisors was under $5.12, the highest was over $50.00, and the average entry-level wage was $6.50 per hour.

National: A buyer's income depends upon the amount and type of product purchased, the employer's sales volume and, to some extent, the buyer's seniority. The median hourly wage of buyers was $15.90 in 1992. The middle 50% of purchasers and buyers earned between $11.10 and $21.48; the lowest 10% averaged less than $6.70, and the top 10% earned more than $27.20 per hour. Median hourly earnings of retail sales workers in the apparel field was $6.38 in 1992. Wages for retail sales workers are much higher in areas where employers have difficulty attracting and retaining workers.

JCCC Career Program Completers: An average hourly wage of $9.20 was reported by 1992-93 JCCC fashion merchandising program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to fashion merchandising. The one respondent employed in the current job for one year or less reported an hourly wage of $8.89.

An average hourly wage of $10.18 was reported by 1989-90 completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

All of the 1992-93 fashion merchandising program completers responding to the January 1994 short-term follow-up study were working in a job related to fashion merchandising.

Approximately 63% of the 1989-90 fashion merchandising program completers contacted in 1994 were employed in a job related to fashion merchandising, and the remainder were working in an unrelated job.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

FIRE SCIENCE

Employment of firefighters is expected to increase about as fast as the average for all occupations through the year 2005. Much of the expected increase will occur in smaller communities with expanding populations that augment volunteers with career firefighters to better meet growing, increasingly complex fire protection needs. Little growth is expected in large, urban fire departments. The number of qualified applicants in most areas generally exceeds the number of job openings, even though the written examination and physical requirements eliminate many applicants. This situation is expected to persist through the year 2005.

Experience as a volunteer firefighter or in the Armed Forces, and completion of community college courses in fire science, will improve an applicant's chances for appointment. In fact, an increasing proportion of entrants to this occupation in recent years have some post-secondary education.

Employment Information

- ***Greater Kansas City Area***: About 1,198 workers were employed as firefighters in the Greater Kansas City area in 1990, with 1,252 positions anticipated by the year 2000 (+4.6%). On the average, 44 annual openings are anticipated, including replacements. Firefighting supervisors held 454 jobs in 1990, with 475 projected by the year 2000 (+4.6%). Approximately 18 average annual supervisory openings, including replacements, are anticipated.

  State: Firefighters held 3,899 jobs in Missouri in 1990, with 4,610 jobs projected by the year 2000. Approximately 201 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

  National: Approximately 305,000 workers were employed in firefighting occupations in 1992, with 354,000 jobs projected by the year 2005 (+16.3%). Approximately 14,000 average annual openings, including replacements, are anticipated.

Salary Information

Greater Kansas City Area: Firefighters in Johnson, Leavenworth, Miami and Wyandotte Counties earned between $22,006 and $25,293 on the average in 1993. The lowest reported salary for firefighters was under $16,286, the highest was over $37,877, and the average entry-level salary was $17,576 per year. Fire supervisors

earned between $33,862 and $38,938 on the average in 1993. The lowest reported salary for supervisors was under $21,590 and the highest was over $57,678 per year.

State: In 1993 firefighters in Kansas earned between $18,242 and $20,987 on the average. The lowest reported salary for Kansas firefighters was under $9,235, the highest was over $37,877, and the average entry-level salary was $16,099 per year. Fire inspectors earned between $25,938 and $29,827 on the average. The lowest reported salary for fire inspectors was under $21,590 and the highest was over $37,877 per year. Fire fighting and prevention supervisors earned between $23,982 and $27,581 on the average in 1993. The lowest salary reported for fire supervisors in Kansas was under $16,286 and the highest was over $57,678 per year.

National: Median annual earnings for firefighting occupations were $33,072 in 1992. The middle 50% earned between $25,948 and $42,848; the lowest 10% averaged less than $18,824 and the highest 10% earned more than $51,000. Fire lieutenants and fire captains may earn considerably more.

JCCC Career Program Completers: An average annual salary of $25,834 was reported by 1992-93 JCCC fire science program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to fire science.

An average annual salary of $30,618 was reported by 1989-90 fire science program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

Approximately 88% of the fire science program completers who responded to the 1994 short-term follow-up study and 91% of those responding to the long-term follow-up conducted in 1994 were employed in a job related to fire science. The remainder of respondents were working in unrelated jobs.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

GROUNDS & TURF MANAGEMENT

Employment of gardeners and groundskeepers (the closest occupational category for which data were available) is expected to increase much faster than the average for all occupations through the year 2005 in response to increasing demand for gardening and landscaping services. More developers are using landscaping services, both interior and exterior, to attract prospective buyers and tenants. In addition, owners of many existing buildings and facilities are upgrading their landscaping, and a growing number of homeowners are using lawn-maintenance and landscaping services to enhance the beauty and value of their property. Growth in the number of parks, athletic fields, golf courses, cemeteries, and similar facilities also can be expected to add to the demand for these workers.

Job openings should be plentiful because the occupation is large and turnover is high. There are no national standards for gardeners and groundskeepers, but some states require certification for workers who use chemicals extensively. Generally, a gardener or groundskeeper can advance to supervisor after several years of progressively responsible experience. Supervisors may then advance to grounds manager or superintendent for a golf course or other facility. Many gardeners and groundskeepers become landscape contractors.

Employment Information

Greater Kansas City Area: Gardeners and groundskeepers held 5,203 jobs in the Greater Kansas City area in 1990, with 6,723 jobs projected by the year 2000 (+29.2%). Approximately 218 average annual openings, including replacements, are anticipated.

State: Gardeners and groundskeepers held 19,251 jobs in Missouri in 1990, with 25,330 jobs projected by the year 2000 (+31.6%). Approximately 851 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Gardeners and groundskeepers held 884,000 jobs nationwide in 1992, with 1.2 million jobs projected by the year 2005 (+35.2%). Approximately 343,000 average annual openings, including replacements, are anticipated. Gardeners and groundskeepers are listed among the occupations with the largest projected numerical increases to the year 2005.

Salary Information

Johnson County: The median hourly wage for lawn service managers in Johnson County was between $9.03 and $10.38 in 1994. The lowest reported wage was under $6.80 and the highest was over $24.10 per hour.

State: The average hourly wage for gardeners and groundskeepers in Kansas was between $6.88 and $7.91 in 1993. The lowest reported wage was under $4.44, the highest was over $13.76, and the average entry-level wage was $5.84 per hour. The average hourly wage for lawn service managers in Kansas was between $11.91 and $13.70 per hour.

National: The median hourly wage of gardeners and groundskeepers was $6.88 in 1992; the middle 50% earned between $5.25 and $9.13, the lowest 10% earned less than $4.38, and the top 10% earned more than $11.88 per hour.

JCCC Salary and Placement Information

This program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

HEALTH INFORMATION TECHNOLOGY

Employment of medical record technicians is expected to grow much faster than the average for all occupations through the year 2005 due to rapid growth in the number of medical tests, treatments, and procedures and because medical records will be increasingly scrutinized by third-party payers, courts, and consumers. Although hospitals will continue to employ the most technicians, the need for detailed medical records in offices and clinics of doctors of medicine should translate into rapid growth in employment opportunities for medical record technicians in large group practices and offices of specialists. Rapid growth is also expected in health maintenance organizations, nursing homes, and home health agencies.

Most employers prefer to hire Accredited Record Technicians (ART). Accreditation is obtained by passing a written examination offered by the American Medical Record Association. To take the examination, a person must be a graduate of a 2-year accredited associate degree program.

Employment Information

Greater Kansas City Area: Medical record technicians are listed among the fastest growing occupations in the Greater Kansas City area. Medical record technicians held 646 jobs in the Greater Kansas City area in 1990. Approximately 924 jobs are projected by the year 2000 (+43.0%), with 38 average annual openings, including replacements, anticipated.

State: Medical record technicians held 1,859 jobs in Missouri in 1990, with 2,631 jobs projected by the year 2000 (+41.5%). Approximately 107 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Medical record technicians held about 76,000 jobs in 1992, with 123,000 jobs projected by the year 2005 (+61.5%). Approximately 12,000 average annual openings, including replacements, are anticipated. Medical record technicians are listed among the fastest growing occupations to the year 2005.

Salary Information

Greater Kansas City Area: The average hourly wage for medical record technicians in Johnson, Leavenworth, Miami and Wyandotte Counties was between $7.81 and $8.99 in 1993. The lowest reported wage was under $5.90, and the highest was over $10.39 per hour.

State: The average hourly wage for medical record technicians in Kansas was between $7.04 and $8.10 in 1993. The lowest wage reported was under $5.12, the highest was over $11.96, and the average entry-level wage was $8.37 per hour. The lowest entry-level wage reported was $7.00, and the highest was $11.00 an hour.

National: According to a 1992 survey of AHIMA members, accredited record technicians who worked as coders averaged $11.30 per hour, unaccredited coders averaged $9.77, and accredited record technicians in supervisory positions averaged $14.23 per hour. The average annual salary for medical record technicians in the federal government in nonsupervisory, supervisory, and managerial positions was $10.58 per hour in 1993.

JCCC Career Program Completers: An average hourly wage of $8.38 was reported by 1992-93 health information technology program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to their course of study. Completers who had been working in their current related job for one year or less reported an average hourly wage of $7.92.

An average hourly wage of $9.33 was reported by respondents to the long-term follow-up study of 1989-90 career program completers conducted in 1994 who were working full-time in a job related to health information technology.

JCCC Placement Information

All of the respondents to the 1994 short-term follow-up of 1992-93 health information technology program completers were working in a related job.

Four of the six health information technology program completers responding to the 1994 long-term follow-up study of 1989-90 career program completers were working in a job related to their course of study; one was employed in an unrelated job and one was out of the labor force.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

HOSPITALITY MANAGEMENT

Employment of restaurant and food service managers is expected to increase much faster than the average for all occupations through the year 2005. Employment of wage and salary managers in eating and drinking places is expected to increase more rapidly than self-employed managers. New restaurants are increasingly affiliated with national chains rather than being independently owned and operated. As this trend continues, fewer owners will manage restaurants themselves, and more restaurant managers will be employed to run the establishments.

Job opportunities are expected to be best for persons with bachelor's or associate degrees in restaurant and institutional food service management. Willingness to relocate is often essential for advancement to positions with greater responsibility. Managers often advance to larger establishments, or regional management positions with restaurant, hotel, or motel chains.

Employment Information

Greater Kansas City Area: Food service and lodging managers held 2,923 jobs in the Greater Kansas City area in 1990. Approximately 3,416 jobs are projected by the year 2000 (+16.9%), with 91 average annual openings, including replacements, anticipated.

State: Food service and lodging managers held 10,734 jobs in Missouri in 1990, with 12,306 jobs projected by the year 2000 (+14.7%). Approximately 313 average annual openings, including replacements, are anticipated. Recent data are unavailable for the State of Kansas.

National: About 532,000 workers were employed as food service and lodging managers in 1992, with 764,000 jobs projected by the year 2005 (+43.5%). Approximately 67,000 average annual openings, including replacements, are anticipated.

Salary Information

JCCC Career Program Completers: An average annual salary of $20,134 was reported by 1992-93 hospitality management program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to hospitality management. Males reported an average annual salary of $21,029 compared to $19,490 reported by females. The majority had been employed in their current full-time related job for one year or less.

JCCC Career Program Completers: An average annual salary of $20,134 was reported by 1992-93 hospitality management program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to hospitality

management. Males reported an average annual salary of $21,029 compared to $19,490 reported by females. The majority had been employed in their current full-time related job for one year or less.

An average annual salary of $21,632 was reported by 1989-90 hospitality management program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994. Male respondents reported an average annual salary of $31,200 and females averaged $19,240.

Johnson County: Food service and lodging managers in Johnson County earned a median annual salary of between $18,782 and $21,590 in 1994. The lowest salary reported was under $10,650, the highest was over $100,000, and the median entry-level salary was $14,560 per year.

State: The average salary reported for food service and lodging managers in Kansas was $19,822 in 1993. The lowest salary reported was under $10,650, the highest was over $100,000, and the average entry-level salary was $15,600 per year.

National: Earnings of restaurant and food service managers vary greatly according to the type and size of establishment. Based on a survey conducted for the National Restaurant Association, the median base salary of managers in restaurants was estimated to be about $27,900 a year in early 1993, but managers of the largest restaurants and institutional food service facilities often had annual salaries in excess of $45,000. Managers of fast-food restaurants reported a median base salary of $24,900 a year; managers of full-menu restaurants with table service, almost $30,400; and managers of commercial and institutional cafeterias, nearly $29,300 a year. Besides a salary, most managers received an annual bonus or incentive payment based on their performance. In 1993, most of these payments ranged between $2,000 and $8,000 a year.

JCCC Placement Information

Fully 91% of the 1992-93 hospitality management program completers responding to the January 1994 short-term follow-up study were employed full-time in a related job; 4.5% were working in an unrelated job and 4.5% were pursuing additional education.

Five of the eight 1989-90 completers contacted in 1994 were employed in a job related to hospitality management; one was working in an unrelated job, one was out of the labor force, and one was unemployed and looking for work.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers. Caution should also be exercised when interpreting local, state and national salary data as these data do not differentiate between salaries of postsecondary hospitality management career program completers and wages earned by less qualified food and lodging managers.

HVAC TECHNOLOGY:
HEATING, VENTILATION AND AIR CONDITIONING

Employment of heating, air-conditioning, and refrigeration mechanics is expected to increase faster than the average for all occupations through the year 2005. In addition to jobs created by economic growth, the number of retirements is expected to rise as more of these workers reach retirement age. A growing concern about energy management and conservation also should prompt installation of new energy-saving heating and air-conditioning systems in existing homes and buildings.

Because of the increased sophistication of heating, air-conditioning, and refrigeration systems, most employers prefer to hire those with technical school or apprenticeship training. Experienced mechanics may need to take courses to keep up with changes in technology and to expand their skills. Provisions of the Clean Air Act require that all air-conditioning and refrigeration technicians had to be certified by November 1994 to work on systems involving refrigerant recovery or recycling.

Employment Information

Greater Kansas City Area: Heating, air conditioning and refrigeration mechanics held 1,317 jobs in the Greater Kansas City area in 1990, with 1,504 jobs projected by the year 2000 (+14.2%). Approximately 33 average annual openings are anticipated, including replacements.

State: Heating, air conditioning and refrigeration mechanics held 3,981 jobs in Missouri in 1990, with 4,542 jobs projected by the year 2000 (+14.1%). Approximately 99 average annual openings are anticipated, including replacements. Recent data are unavailable for Kansas.

National: About 212,000 heating, air conditioning, and refrigeration mechanics and installers were employed nationwide in 1992, and approximately 274,000 jobs are projected by the year 2005 (+29.4%). Approximately 20,000 average annual openings, including replacements, are anticipated.

Salary Information

Greater Kansas City Area: The average hourly wage for heating, air conditioning, and refrigeration mechanics and installers in Johnson, Leavenworth, Miami and Wyandotte Counties was between $13.65 and $15.70 in 1993. The lowest reported wage was under

$6.80, the highest was over $24.10, and the average entry-level wage was $8.56 per hour.

State: The average hourly wage for heating, air conditioning, and refrigeration mechanics and installers in Kansas was between 11.91 and $13.69 in 1993. The lowest reported wage was under $4.44, the highest was over $24.10, and the average entry-level wage was $6.48 per hour.

National: Median hourly earnings of air-conditioning, heating, and refrigeration mechanics who worked full-time were $11.85 in 1992. The middle 50% earned between $8.90 and $14.90. The lowest 10% earned less than $7.00 and the top 10% earned more than $18.50 per hour.

JCCC Career Program Completers: An average hourly wage of $11.28 was reported by 1992-93 HVAC technology program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to HVAC technology. An average hourly wage of $8.38 was reported by respondents employed in their current HVAC job for one year or less.

Respondents to the long-term follow-up study of 1989-90 career program completers employed full-time in a job related to HVAC technology reported an average hourly wage of $13.21 in 1994.

JCCC Placement Information

About 75% of the 1992-93 HVAC technology program completers responding to the January 1994 short-term follow-up study were working in a job related to HVAC technology; 20% were working in an unrelated job, and 5% were unemployed and looking for work.

Over 83% of the 1989-90 HVAC technology program completers responding to the 1994 long-term study were working in a job related to HVAC; the other respondents were employed in unrelated jobs.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

INTERIOR MERCHANDISING

(Note. Since no separate occupational category was detailed for interior merchandising in available sources, employment and salary information is provided for related occupations for which completers of this program qualify.) Employment of purchasers and buyers is expected to increase more slowly than the average for all occupations through the year 2005. Over the past few years, the organizational structure of the wholesale and retail trade industries has been changing. Many firms have purchased or merged with other firms. When functions are centralized by the new organization, fewer buyers and managers are needed. Buyers, especially those who buy items which are affected by shifting consumer preferences, have less job security than people in many other occupations. Buyers who buy items that don't sell well are often fired.

Interior merchandising program completers will always find ample employment opportunities as retail salespersons and have better opportunities for advancement than nonprogram completers. Employment of retail salespersons is expected to increase about as fast as the average for all workers through the year 2005. As in the past, replacement needs will generate an exceptionally large number of sales jobs because the occupation is large and turnover is much higher than the average.

Employment Information

Greater Kansas City Area: Interior designers held 561 jobs in 1990, with 658 jobs projected by the year 2000 (+17.3%). Wholesale and retail buyers held 1,480 jobs in the Greater Kansas City area in 1990. Approximately 1,703 jobs are projected through the year 2000 (+15.1%), with 50 average annual openings, including replacements, anticipated.

Retail sales is among the occupations with the largest anticipated job growth to the year 2000 in the Greater Kansas City area. Salespersons held 25,165 jobs in 1990, and approximately 27,880 jobs are projected by the year 2000 (+10.8%). First line sales supervisors held 13,569 jobs in 1990, with 15,234 jobs projected by the year 2000 (+12.3%). Approximately 379 average annual supervisory openings and 1,165 average annual retail sales openings, including replacements, are anticipated.

State: Interior designers held 1,883 jobs in Missouri in 1990, with 2,129 jobs projected by the year 2000. Approximately 48 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Purchasing managers held about 221,000 jobs in 1992, with 252,000 jobs projected by the year 2005 (+13.9%). Approximately 13,000 average annual job openings, including replacements, are projected. Retail sales workers held 3.7 million jobs in 1992, with 4.4 million jobs projected by the year 2005 (+21.5%).

Salary Information

Johnson County: The median hourly wage for interior designers in Johnson County was between $9.03 and $10.38 in 1994. The lowest wage reported was under $5.90, the highest was over $18.21, and the median entry-level wage was $9.61 per hour.

State: The average hourly wage for interior designers in Kansas was between $9.24 and $10.63 per hour in 1993. The lowest wage reported was under $4.44, the highest was over $18.21, and the median entry-level wage was $6.93 per hour.

National: A buyer's income depends upon the amount and type of product purchased, the employer's sales volume and, to some extent, the buyer's seniority. The median hourly wage of buyers was $15.90 in 1992. The middle 50% of purchasers and buyers earned between $11.10 and $21.48; the lowest 10% averaged less than $6.70, and the top 10% earned more than $27.20 per hour. Median hourly earnings of retail sales workers in the furniture and home furnishings field were $8.85 in 1992.

JCCC Career Program Completers: An average hourly wage of $16.50 was reported by 1992-93 JCCC interior merchandising program completers responding to the January 1994 short-term follow-up study who were working full-time in a related job.

The one respondent to the 1994 long-term follow-up study of 1989-90 career program completers who was working full-time in a job related to interior merchandising reported an average hourly wage of $10.00.

JCCC Placement Information

Fully 75% of the 1992-93 interior merchandising program completers responding to the January 1994 short-term follow-up study were working in a job related to interior merchandising and 25% were employed in unrelated jobs.

Three of the ten 1989-90 interior merchandising program completers contacted in 1994 were employed in a job related to interior merchandising; three were working in unrelated jobs, two were out of the labor force, and two were unemployed and looking for work.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

MARKETING & MANAGEMENT

Employment of marketing, advertising, and public relations managers is expected to increase faster than the average for all occupations through 2005. Increasingly intense domestic and global competition in products and services offered to consumers should require greater marketing, promotional, and public relations efforts. Employment of marketing, advertising, and public relations managers is expected to grow much faster than the average in most business services industries, such as computer and data processing, and management and public relations firms, while average growth is projected in manufacturing industries overall.

Most marketing, advertising, and public relations management positions are filled by promoting experienced staff or related professional or technical personnel. Although a wide range of educational backgrounds are suitable for entry into marketing, advertising, and public relations managerial jobs, college graduates with extensive experience, a high level of creativity, and strong communication skills should have the best job opportunities.

Employment Information

Greater Kansas City Area: Marketing, advertising and public relations managers are listed among the fastest growing occupations and among those anticipating the largest job growth in the Greater Kansas City area to the year 2000. Marketing, advertising, and public relations managers held 3,215 jobs in the Greater Kansas City area in 1990. Approximately 4,147 jobs are projected through the year 2000 (+29%), with 155 average annual openings, including replacements, anticipated.

State: Marketing, advertising, and public relations managers held 8,720 jobs in Missouri in 1990. Approximately 11,092 jobs are projected by the year 2000 (+27.2%) with 406 average annual openings, including replacements, anticipated. Recent data are unavailable for the State of Kansas.

National: Marketing, advertising, and public relations managers held about 432,000 jobs in 1992. Approximately 588,000 jobs are projected for the year 2005 (+36.1%), with 56,000 average annual openings, including replacements, anticipated.

Salary Information

Johnson County: The median annual salary for marketing, advertising, and public relations managers in Johnson County was between $37,877 and $43,555 in 1994. The lowest reported salary was under $14,144, the highest was over $100,000, and the average entry-level salary throughout the Greater Kansas City area was $25,501.

State: The average annual salary for marketing, advertising, and public relations managers in Kansas was $38,979 in 1993. The lowest salary reported was under $10,650, the highest was over $100,000, and the average entry-level salary was $27,352 per year.

National: Salary levels vary substantially depending upon the level of managerial responsibility, length of service, education, and size and location of the firm. The median annual salary of marketing, advertising, and public relations managers was $41,000 in 1992. The lowest 10% earned $22,000 or less, and the top 10% earned $79,000 or more. According to a College Placement Council survey, starting salary offers to marketing majors graduating with a bachelor's degree in 1993 averaged about $24,000; advertising majors, about $21,000.

JCCC Program Completers: An average annual salary of $22,048 was reported by 1992-93 marketing and management program completers responding to the January 1994 short-term follow-up study who were working full-time in a related job. Respondents employed in their current full-time related job for one year or less reported an average annual salary of $20,030.

An average annual salary of $17,222 was reported by 1989-90 marketing and management program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

Nearly 91% of respondents to the January 1994 short-term follow-up of 1992-93 marketing and management program completers were employed in a job related to marketing and management, and 9% were pursuing additional education.

Four of the five respondents to the 1994 follow-up of 1989-90 marketing and management program completers were employed in a job related to their JCCC course of study and one was unemployed and looking for work.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

METAL FABRICATION

Metal fabricators construct and assemble structural metal products such as frameworks or shells for machinery, ovens, tanks, stacks and metal parts for buildings and bridges according to job orders or blueprints, utilizing welding skills. Welders who work on aircraft, boilers, buildings, bridges, pipelines, and other jobs where the strength of the weld is critical for safety must pass employer performance tests or standard tests to become certified. Employment outlooks and wages are provided for related occupational categories where metal fabricators were not detailed separately in available sources.

Employment of welders, cutters, and welding machine operators is expected to increase more slowly than the average for all occupations through the year 2005. Most job openings will result from the need to replace experienced workers who transfer to other occupations or leave the labor force. In certain industries--construction, wholesale trade, and repair services, for example--employment of welders and cutters will grow. The level of construction is expected to expand, as is the number of metal products needing repair, increasing the need for welding and cutting. This work is generally less routine and more difficult to automate than other welding jobs. Despite the welding jobs eliminated by robot welding systems, manual welders will still be needed for the maintenance, repair, and other work in manufacturing that cannot be automated.

Employment Information

Greater Kansas City Area: Metal fabricating setters and operators held 1,174 jobs in the Greater Kansas City area in 1990. Approximately 1,356 jobs are projected by the year 2000 (+15.5%), with 45 average annual openings, including replacements, anticipated.

State: No recent data are available for the State of Kansas.

National: Metal fabricators held approximately 45,000 jobs in 1992, with 45,000 jobs also projected by 2005 (no change). Welders and cutters held 306,000 jobs in 1992, with 352,000 jobs projected by the year 2005 (+15.2%). Approximately 41,000 average annual openings, including replacements, are projected.

Salary Information

Johnson County: The median hourly wage for metal fabricators (structural metal products) in Johnson County in 1994 was between $7.84 and $9.02. Welders and

cutters reported a median hourly wage of between $10.29 and $11.95 in 1994. The lowest reported hourly wage was less than $6.80 and the highest was more than $18.21.

State: The average hourly wage of metal fabricators (structural metal products) and welders and cutters in Kansas was between $9.90 and $11.44 in 1993. The lowest wage reported was under $5.12, the highest was over $18.21, and the average entry-level wage was $7.49 per hour.

National: The median hourly wage for welders and welding machine operators was about $11.00 in 1992. The middle 50% earned between $8.55 and $14.05, the top 10% earned more than $17.88, and the lowest 10% earned less than $6.95 per hour.

JCCC Salary and Placement Information

The one respondent to the 1990 long-term follow-up study of 1986-87 career program completers who was working full-time in a job related to metal fabrication reported an hourly wage of $12.00. No completers of the metal fabrication program responded to any of the more recent follow-up studies of JCCC career program completers.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

NURSING

Employment of registered nurses is expected to grow much faster than the average for all occupations through the year 2005. Driving this growth will be technological advances in patient care which permit a greater number of medical problems to be treated, and increasing emphasis on primary care. Employment in hospitals, the largest sector, is expected to grow more slowly than in other health-care sectors. However, rapid growth is expected in hospitals' outpatient facilities. Employment in home health care is also expected to grow very rapidly in response to a growing number of older persons with functional disabilities, consumer preference for care in the home, and technological advances which make it possible to bring increasingly complex treatments into the home.

Employment Information

Greater Kansas City Area: Registered nurses are among the fastest growing occupations and among those with the largest job growth in the Greater Kansas City area. Registered nurses held 13,922 jobs in 1990. Approximately 18,318 jobs are projected by the year 2000 (+31.6%), with 631 average annual openings, including replacements, anticipated.

State: Nurses held 38,664 jobs in Missouri in 1990, with 49,360 jobs projected by the year 2000 (+27.7%). Approximately 1,600 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Registered nurses held approximately 1.8 million jobs in 1992, with 2.6 million jobs projected by the year 2005 (+41.7%). Approximately 186,000 average annual openings, including replacements, are anticipated. Registered nurses are listed among the fastest growing, and among occupations with the largest projected numerical increases, to the year 2005.

Salary Information

Johnson County: The average annual salary for nurses throughout Johnson County in 1994 was between $32,926 and $37,856. The lowest reported salaries were under $18,762 and the highest were over $57,678 per year.

State: The average annual salary for registered nurses in Kansas was between $28,870 and $33,197 in 1993. The lowest reported salary was under $16,286, the highest was over $66,331, and the average entry-level salary was $25,126 per year.

National: Median annual earnings of full-time salaried registered nurses were $34,424 in 1992. The middle 50% earned between $27,820 and $41,600; the lowest 10% earned less than $21,944 and the top 10% earned more than $50,960.

JCCC Career Program Completers: An average annual salary of $31,450 was reported by 1992-93 nursing program completers responding to the January 1994 short-term follow-up study who were working full-time in a job related to nursing. Male respondents reported an average annual salary of $33,280 compared to $31,408 for females.

An average annual salary of $35,069 was reported by 1989-90 nursing program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

All of the 1992-93 nursing program completers responding to the 1994 short-term follow-up study were working in a job related to nursing. Approximately 94% of the 1994 respondents to the long-term follow-up study of 1989-90 nursing program completers were employed in a related job and 6% were out of the labor force.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

OCCUPATIONAL THERAPY ASSISTANT
AND
PHYSICAL THERAPY ASSISTANT

Occupational therapy assistants aid occupational therapists in administering medically oriented occupation programs to assist in rehabilitating patients in hospitals and other institutions. Physical and corrective therapy assistants prepare patients and administer physical therapy treatment, such as massages, heat, light and sound treatments, and traction. These workers instruct, motivate, and assist patients with learning and improving functional activities. They work in offices of physicians and other health practitioners, hospitals, and outpatient care facilities. Much faster than average growth is anticipated in both occupations through the year 2005.

Both the occupational therapy assistant and the physical therapy assistant programs are offered in cooperation with Penn Valley Community College. The support courses are provided at JCCC, and the clinical courses are conducted at Penn Valley and affiliated clinical agencies. All program completers are required to pass a national certification examination.

Employment Information

Greater Kansas City Area: Both occupational and physical therapy assistants are among the fastest growing occupations in the Greater Kansas City area. Occupational therapy assistants held 222 jobs in the Greater Kansas City area in 1990. Approximately 312 jobs are projected by the year 2000 (+40.5%) with 11 average annual openings, including replacements, anticipated. Physical and correctional therapy assistants held 385 jobs in the Greater Kansas City area in 1990, with 535 jobs projected by the year 2000 (+39.0%). About 18 average annual openings for physical therapy assistants are anticipated, including replacements.

State: Occupational therapy assistants held 628 jobs in Missouri in 1990, with 841 jobs projected by the year 2000 (+33.9%). Approximately 26 average annual openings, including replacements, are anticipated. Physical and corrective therapy assistants held 1,187 jobs in Missouri in 1990, with 1,640 jobs projected by the year 2000 (+38.2%). Approximately 55 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: Physical and corrective therapy assistants and aides are listed among the fastest growing occupations to the year 2005. Nearly 12,000 occupational therapy

assistants and aides were employed in 1992. Approximately 61,000 physical and corrective therapy assistants and aides were employed in 1992. Data detailing the number of jobs projected by the year 2005 and anticipated annual openings were unavailable.

Salary Information

Greater Kansas City Area: The average hourly wage of physical and corrective therapy assistants and aides in Johnson, Leavenworth, Miami and Wyandotte Counties was between $8.10 and $9.32 in 1993. The lowest reported wage was under $6.80 and the highest was over $10.39 per hour.

State: The average hourly wage of physical and corrective therapy assistants and aides in Kansas was between $6.19 and $7.11 in 1993. The lowest reported wage was under $5.12, the highest was over $10.39, and the average entry-level wage was $5.29 per hour.

JCCC Salary and Placement Information

Salary and placement data is incomplete for both the occupational therapy assistant program and the physical therapy assistant program. However, an average hourly wage of $10.49 was reported by physical therapy assistant program completers who responded to the 1992 short-term follow-up study of 1990-91 completers. The average hourly wage reported by respondents in their current job for one year or less was $10.15. The one physical therapy assistant program completer responding to the 1994 long-term follow-up study of the Class of 1989-90 was working in a related job and earned $23.00 per hour.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

OFFICE SYSTEMS TECHNOLOGY

Employment of secretaries is expected to grow more slowly than the average for all occupations through the year 2005. Nevertheless, employment opportunities should be quite plentiful, especially for well-qualified and experienced secretaries who, according to many employers, are in short supply. The trend toward secretaries assuming more responsibilities traditionally reserved for managers and professionals should also stimulate demand.

Employment Information

Greater Kansas City Area: Secretarial positions are among both the fastest growing occupations and those with the largest anticipated job growth in the Greater Kansas City area to the year 2000. Secretaries held 25,365 jobs in the Greater Kansas City area in 1990. Of those, 1,906 were legal secretaries, 1,684 were medical secretaries, and 21,775 were other categories of secretaries. Approximately 29,720 secretarial jobs are projected by the year 2000 (+17,2%), with 1,001 average annual openings, including replacements, anticipated. First line clerical supervisors held 10,163 jobs in 1990, with 11,464 jobs projected by the year 2000 (+12.8%). Approximately 367 average annual openings for clerical supervisors are anticipated, including replacements.

State: Secretaries held over 70,000 jobs in Missouri in 1990. Of those, 4,110 were legal secretaries and 4,680 were medical secretaries. Over 80,516 secretarial jobs are projected by the year 2000 (+15.0%). Of those, 5,181 will be for legal secretaries (+26.1%) and 6,582 will be for medical secretaries (+40.6%). Approximately 2,610 average annual secretarial openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: About 4.2 million secretaries, stenographers and typists held jobs in 1992, with 4.5 million jobs projected by the year 2005 (+6.1%). Of those, 280,000 were legal secretaries (439,000 jobs projected; +57.1%), and 235,000 were medical secretaries (341,000 jobs projected; +45.2%). Approximately 692,000 average annual openings for secretaries, stenographers and typists are anticipated, including replacements. Legal and medical secretaries are among the fastest growing occupations to the year 2005, and all other secretaries and clerical supervisors and managers are listed among the occupations with the largest numerical increases projected.

Salary Information

Greater Kansas City Area: The average hourly wage for secretaries throughout the Greater Kansas City area was $7.25, and in Johnson, Leavenworth, Miami and

Wyandotte Counties it was between $9.20 and $10.58 in 1993. On the Kansas side, legal secretaries averaged between $10.51 and $12.09, and medical secretaries averaged between $7.98 and $9.18. The lowest reported wage for secretaries on the Kansas side was under $4.44, the highest was over $20.95, and average entry-level wage was $7.59 per hour. The average wage for clerical supervisors in Johnson, Leavenworth, Miami and Wyandotte Counties was between $12.83 and $14.75 per hour. The lowest reported wage for clerical supervisors was under $5.12, the highest was over $42.18, and the average entry-level wage was $8.27 per hour.

State: The average wage for Kansas secretaries was between $8.29 and 9.53 per hour in 1993. The average wage for legal secretaries was between $9.70 and $11.16, and the average for medical secretaries was between $7.57 and $8.71 per hour. The lowest reported wage for secretaries was under $4.44, the highest was over $20.95, and the average entry-level wage was $6.79 per hour. The average wage for clerical supervisors was between $11.46 and $13.17 per hour in 1993. The lowest reported wage for clerical supervisors was under $5.12, the highest was over $42.18, and the average entry-level wage was $7.36 per hour.

National: The average hourly wage for all secretaries was $12.84 in 1992. Salaries vary a great deal, however, reflecting differences in skill, experience, and level of responsibility, ranging from $20,000 to $36,000. The starting hourly rate for inexperienced secretaries in the federal government was $7.89 in 1993, and the average for all secretaries employed by the federal government was $11.54 per hour.

JCCC Career Program Completers: An average hourly wage of $10.25 was reported by 1992-93 office systems technology program completers responding to the January 1994 short-term follow-up study who were working full-time in a related job for one year or less. An average hourly wage of $11.31 was reported by 1989-90 office systems technology program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994. These data combine findings for both the office automation technology program and the office careers program.

JCCC Placement Information

Nearly 78% of the 1992-93 JCCC office systems technology program completers responding to the January 1994 short-term follow-up study were working in a related job; 10% were working in an unrelated job, 10% were pursuing additional education, and 2% were unemployed and looking for work. Nearly 93% of 1989-90 office systems technology program completers contacted in 1994 were employed in a related job, and 7% were out of the labor force. These data combine findings for both the office automation technology program and the office careers program.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

PARALEGAL

Employment of paralegals is expected to grow much faster than the average for all occupations through the year 2005. Although the number of job openings for paralegals is expected to increase significantly through the year 2005, so will the number of persons pursuing this career. Thus, keen competition for jobs should continue as the growing number of graduates from paralegal training programs keeps pace with employment growth. Still, job prospects are expected to be favorable for graduates of highly regarded formal programs.

Graduation from an American Bar Association (ABA) approved program can enhance one's employment opportunities, and only 177 of the 600 paralegal programs offered in the United States have been approved by the ABA. JCCC's paralegal program is an ABA approved program.

Employment Information

Greater Kansas City Area: Paralegals are among the fastest growing occupations in the Greater Kansas City area. Paralegals held 633 jobs in 1990. Approximately 1,006 jobs are projected by the year 2000 (+58.9%), with 41 average annual openings, including replacements, anticipated.

State: Paralegals held 1,407 jobs in Missouri in 1990, with 2,080 jobs projected by the year 2000 (+47.8%). Approximately 76 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: About 95,000 paralegals held jobs in 1992, with 176,000 jobs projected by the year 2005 (+86.1%). Approximately 21,000 average annual openings, including replacements, are anticipated. Paralegals are listed among the fastest growing occupations to the year 2005.

Salary Information

Johnson County: The median annual salary for paralegal personnel employed in Johnson County was between $24,877 and $28,600 in 1994. The lowest reported salary was under $18,762 and the highest was over $37,877 per year.

State: The average annual salary for paralegal personnel in Kansas was between $23,816 and $27,394 in 1993. The lowest reported earnings were under $14,144, and the highest were over $43,576 per year.

National: Paralegals earned an average annual salary of about $28,300 in 1993 according to a utilization and compensation survey by the National Association of Legal Assistants. Starting salaries averaged $23,400 per year, while paralegals from 6 to 10 years of experience averaged $28,200. Paralegal specialists hired by the federal government in 1993 started at about $18,000 to $23,000 per year, depending on their training and experience. The average annual salary of paralegals who worked for the federal government in 1993 was about $37,600.

JCCC Career Program Completers: An average annual salary of $22,298 was reported by 1992-93 paralegal program completers responding to the January 1994 short-term follow-up study who were employed full-time in a related job. Male respondents reported an average annual wage of $18,720 compared to $22,464 reported by female paralegal program completers. An average annual salary of $20,342 was reported by respondents who had been employed in their current full-time related job one year or less.

An average annual salary of $26,313 was reported by 1989-90 paralegal program completers working full-time in a related job who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

Nearly 80% of paralegal program completers responding to the January 1994 follow-up study were working in a job related to their paralegal career program; over 7% were employed in an unrelated job, 3% were pursuing additional education, 5% were unemployed, and 5% were out of the labor force.

Nearly 71% of respondents to the 1994 follow-up of 1989-90 paralegal program completers were employed in a related job; 14% were working in an unrelated job; 4% were unemployed, and 11% were out of the labor force.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

PRINTING TECHNOLOGY

Employment of printing press operators is expected to grow about as fast as the average for all occupations through the year 2005 a demand printed materials grows. Employment of offset, gravure, and flexographic operators will increase, while employment of letterpress operators will decline. Most new jobs will result from expansion of the printing industry as demand for printed material increases in response to demographic trends, U.S. expansion into foreign markets, and growing use of direct mail by advertisers.

Apprenticeship, once the dominant method of preparing for this occupation, is becoming less prevalent as formal programs of retraining and skill updating for experienced operators become more important. In the future, it is expected that workers will need to retrain several times during their career. Postsecondary education has become increasingly important because of the theoretical knowledge needed to operate advanced equipment. Persons entering the field will face keen competition for jobs from experienced workers and workers who have completed retraining programs.

The associate degree in printing is a cooperative program offered through the Johnson County Area Vocational-Technical School and Johnson County Community College.

Employment Information

Greater Kansas City Area: Printing, binding, & related workers held 4,557 jobs in the Greater Kansas City area in 1990, with 5,486 jobs projected by the year 2000 (+20.4%). Approximately 195 average annual openings, including replacements, are anticipated.

State: Printing, binding, & related workers held 10,719 jobs in Missouri in 1990, with 11,883 jobs projected by the year 2000 (+10.9%). Approximately 357 average annual openings are anticipated, including replacements. No recent data are available for the State of Kansas.

National: About 375,000 printing, binding & related workers held jobs in 1992, with 444,000 jobs projected by the year 2005 (+18.3%). Approximately 46,000 average annual openings, including replacements, are anticipated.

Salary Information

Greater Kansas City Area: The average hourly wage of printing press machine operators and tenders in Johnson, Leavenworth Miami and Wyandotte Counties was between

$10.07 and $11.58 in 1993. The lowest wage reported was under $7.83 and the highest was over $15.83 per hour.

State: The average hourly wage for printing press machine operators and tenders in Kansas was between $10.26 and $11.80 in 1993. The lowest wage reported was under $5.12, the highest was over $18.21, and the average entry-level wage was $6.44 per hour.

National: The basic salary for a press operator depends on the type of press being run and the area of the country in which the work is located. The median hourly wage for a full-time press operator was about $10.50 in 1992. The middle 50% earned between $7.50 and $14.25; the lowest 10% earned an average of $5.38 or less, and the highest 10% earned over $17.75 per hour.

JCCC Salary and Employment Information

This program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

RADIOLOGIC TECHNOLOGY

Employment of radiologic technologists is expected to grow much faster than the average for all occupations through 2005, as the health care industries grow, and because of the vast clinical potential of diagnostic imaging and therapeutic technology. Current as well as new uses of imaging equipment are virtually certain to sharply increase demand for radiologic technologists.

Radiation therapy will continue to be used--alone or in combination with surgery or chemotherapy--to treat cancer. More treatment of cancer is anticipated due to the aging of the population, educational efforts aimed at early detection, and improved ability to detect malignancies through radiologic procedures such as mammography.

Radiologic technology is a cooperative program between JCCC and Penn Valley Community College, with related courses taken at JCCC and lab and clinical courses held at PVCC or at a cooperating health facility.

Employment Information

Greater Kansas City Area: Radiologic technologists and technicians are among the fastest growing occupations in the Greater Kansas City area. Approximately 1,159 workers were employed as radiologic technologists and technicians in 1990, and 1,655 jobs are projected by the year 2000 (+42.8%). About 69 average annual openings, including replacements, anticipated.

State: Radiologic technologists and technicians held 3,016 jobs in Missouri in 1990, with 4,222 jobs projected by the year 2000 (+40.0%). Approximately 170 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: About 162,000 radiologic technologists and technicians were employed in 1992, with 264,000 jobs projected by the year 2005 (+62.7%). Approximately 16,000 average annual openings, including replacements, are anticipated. Radiologic technology is listed among the fastest growing occupations to the year 2005.

Salary Information

National: In 1992, the median annual salary for radiologic technologists who worked year round full time was $28,236. The middle 50% earned between $22,932 and

$33,748; the lowest 10% earned less than $19,708 and the top 10% earned more than $40,456 per year. According to the University of Texas Medical Branch national survey of hospitals and medical centers, the median annual salary for radiation technologists was $25,615 in October 1992 (based on a 40 hour week and excluding shift or area differentials). The average minimum salary was $22,250 and the average maximum was $32,553.

JCCC Salary and Placement Information

An average annual salary of $25,355 was reported by radiologic technology program completers responding to the January 1994 short-term follow-up study of 1992-93 career program completers. Over 92% of the radiologic technology program completers responding to the 1994 follow-up study were employed in a related job and 8% were pursuing additional education.

Radiologic technology program completers responding to the 1994 long-term follow-up study of 1989-90 career program completers who were working full-time in a related job reported an average annual salary of $25,958. Half were in related jobs and half were out of the labor force by choice.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

RAILROADING OPERATIONS

Overall employment of rail transportation workers is expected to increase about as fast as the average for all occupations through the year 2005, ending a long-term decline in employment in railroad operating occupations. Besides growth, many additional job openings for rail transportation workers will arise as workers retire or leave jobs for other reasons. Demand for railroad freight service will grow as the economy expands, but opportunities for railroad transportation workers will be limited because of ongoing reductions in the size of operating crews and improvements in the efficiency of railroad operations. Employment opportunities for locomotive and yard engineers should be slightly better than other rail occupations because they should be less affected by technological changes and reductions in crew size.

Employment Information

Greater Kansas City Area: Approximately 1,518 workers were employed as rail transportation workers in the Greater Kansas City area in 1990, with 1,462 jobs projected by the year 2000 (-3.7%). Railroad conductors and yardmasters held 453 jobs in 1990, with 437 jobs projected by the year 2000 (-3.5%). An average of 45 annual openings are anticipated for all rail transportation workers combined (9 for railroad conductors and yardmasters), primarily due to the need for replacements.

State: Rail transportation workers held 3,001 jobs in Missouri in 1990, with 2,835 jobs projected by the year 2000 (-5.5%). Approximately 88 average annual openings, including replacements, are anticipated. Recent data were unavailable for Kansas.

National: Approximately 116,000 rail transportation workers were employed nationwide in 1992, with 141,000 jobs projected by the year 2005 (+21.4%). About 6,000 average annual openings, including replacements, are anticipated.

Salary Information

National: According to the Brotherhood of Locomotive Engineers, in 1991, through-freight engineers averaged about $59,600 per year, passenger engineers about $57,900, way freight engineers about $54,100, and year engineers about $43,300. According to the Association of American Railroads, in 1991, annual earnings of conductors averaged $40,400 for through-freight and $35,200 for local and way freight. Brake operators

averaged about $33,600 for through-freight and $27,300 for local and way freight. Yard brake operators averaged about $25,600 in 1991, while passenger brake operators averaged $21,700.

Most rail transportation employees in yards work 40 hours a week and receive extra pay for overtime. Most railroad workers in road service are paid according to miles traveled or hours worked, whichever leads to higher earnings. Full-time employees have steadier work, more regular hours, and higher earnings than those assigned to the extra board. Most railroad transportation workers are members of unions.

JCCC Salary and Employment Information

This program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

RESPIRATORY THERAPY

Employment of respiratory therapists is expected to increase much faster than the average for all occupations through the year 2005 because of substantial growth of the middle-aged and elderly population, a development that is virtually certain to heighten the incidence of cardiopulmonary disease. Projected rapid growth in the number of patients with AIDS will also boost demand since lung disease often accompanies AIDS. Opportunities are expected to be highly favorable for respiratory therapists with neonatal care and cardiopulmonary care skills. Very rapid growth is expected in home health agencies, equipment rental companies, and firms that provide respiratory care on a contract basis.

Employment Information

Greater Kansas City: Respiratory therapy is among the fastest growing occupations in the Greater Kansas City area. Respiratory therapists held 483 jobs in 1990. Approximately 665 jobs are projected by the year 2000 (+37.7%), with 28 average annual openings, including replacements, anticipated.

State: Respiratory therapists held 1,295 jobs in Missouri in 1990, with 1,707 jobs projected by the year 2000 (+31.8%). Approximately 69 average annual openings, including replacements, are anticipated. Recent data are unavailable for Kansas.

National: About 74,000 respiratory therapists were employed in 1992, with 109,000 jobs projected by the year 2005 (+48.3%). Approximately 10,000 average annual openings, including replacements, are anticipated. Respiratory therapists are listed among the fastest growing occupations to the year 2005.

Salary Information

National: Median annual earnings for respiratory therapists who worked year round full-time in 1992 were $32,084. The middle 50% earned between $25,116 and $41,236. The lowest 10% earned less than $21,528 and the top 10% earned more than $48,048.

JCCC Career Program Completers: An average annual salary of $24,149 was reported by respiratory therapy program completers working full-time in a job related to respiratory therapy who responded to the January 1994 short-term follow-up study of 1992-93 career program completers. The average annual salary was $23,026 for males and $25,043 for females.

An average annual salary of $30,763 was reported by 1989-90 respiratory therapy program completers working full-time in a job related to respiratory therapy who responded to the long-term follow-up study conducted in 1994.

JCCC Placement Information

Nearly 93% of the respiratory therapy program completers who responded to the 1994 short-term follow-up study of 1992-93 completers were employed in a job related to respiratory therapy, and 7% were working in an unrelated job.

All of the respiratory therapy program completers responding to the 1994 long-term follow-up study of 1989-90 career program completers were working in jobs related to respiratory therapy.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.

SALES AND CUSTOMER RELATIONS

Employment of sales representatives is expected to increase about as fast as the average for all occupations through the year 2005. Although overall employment is expected to increase significantly, the outlook varies by industry and by type of sales job. Those entering this field should remember that sales are affected by changing economic conditions and consumer preferences. As a result, employment opportunities and earnings may fluctuate from year to year.

Individuals interested in pursuing a career in sales should be enthusiastic, outgoing, self-confident, disciplined, hard working, and able to communicate effectively. They should be able to inspire customer confidence and work with little or no supervision. Some companies give personality tests to prospective employees because personality attributes are so important in sales work. Earnings usually increase rapidly with experience, and opportunities for advancement are good for those possessing sales ability and leadership skills.

Employment Information

Greater Kansas City Area: About 100,769 workers were employed in marketing and sales occupations in 1990, with 113,998 jobs projected by the year 2000 (+13.1%). Approximately 4,169 average annual openings, including replacements, are projected.

State: Over 292,000 workers were employed in marketing and sales occupations in 1990, with 315,128 jobs projected by the year 2000 (+11.2%). Approximately 11,605 average annual openings, including replacements, are anticipated. Recent data are unavailable for `Kansas.

National: Approximately 13 million workers were employed in marketing and sales occupations in 1992, with 15.6 million jobs projected by the year 2005 (+20.6%). Approximately 3,5 million average annual openings, including replacements, are anticipated.

Salary Information

Greater Kansas City Area: The 1993 average annual salaries of sales personnel in Johnson, Leavenworth, Miami and Wyandotte Counties ranged from a low of $15,600 to $17,930 for sales agents of selected business services to a high of $50,670 to $58,282 for sales agents of securities, commodities and financial services.

State: The 1993 average annual salaries of sales personnel in Kansas ranged from a low of $14,352 to $16,515 for sales agents of selected business services to a high of $42,349 to $48,714 for sales agents of securities, commodities and financial services.

National: Compensation methods vary significantly by the type of firm and product sold. However, most employers use a combination of salary and commission or salary plus bonus. Commissions are usually based on the amount of sales, whereas bonuses may depend on individual performance, on the performance of all sales workers in the group or district, or on the company's performance.

Median annual earnings of full-time manufacturers' and wholesale sales representatives were about $32,000 in 1992, and the median for salaried insurance sales workers was $30,100. Real estate agents, brokers, and appraisers who usually worked full time had median annual earnings of $26,364. Securities and financial services sales representatives earned a median annual income of $40,300, and advertising sales representatives earned over $26,000 on the average. Representatives selling other business services earned a median annual income of approximately $30,000. Earnings of representatives who sold technical services generally were higher than earnings of those who sold nontechnical services.

JCCC Salary and Placement Information

This program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

WELDING TECHNOLOGY

Employment of welders, cutters, and welding machine operators is expected to increase more slowly than the average for all occupations through the year 2005. In certain industries--construction, wholesale trade, and repair services, for example--employment of welders and cutters will grow more rapidly. Despite the welding jobs eliminated by automated welding systems, manual welders, especially those with a wide variety of skills, will still be needed for the maintenance, repair, and other work in manufacturing that cannot be automated.

The associate degree in welding is a cooperative program offered through the Johnson County Area Vocational-Technical School and Johnson County Community College.

Employment Information

Greater Kansas City Area: Welders and cutters held 1,979 jobs in the Greater Kansas City area in 1990. Approximately 2,197 jobs are projected by the year 2000 (+11.0%), with 69 average annual openings, including replacements, anticipated.

State: Welders and cutters held 6,930 jobs in Missouri in 1990, with 7,376 jobs projected for the year 2000 (+6.4%). Approximately 209 average annual openings are anticipated, including replacements. No recent data are available for the State of Kansas.

National: Welders and cutters held 306,000 jobs in 1992, with 352,000 jobs projected by the year 2005 (+15.2%). Approximately 41,000 average annual openings, including replacements, are projected.

Salary Information

Greater Kansas City Area: The average hourly wage for welders and cutters in Johnson, Leavenworth, Miami and Wyandotte Counties was between $10.10 and $11.62 in 1993. The lowest reported wage was under $5.90, the highest was over $18.21, and the average entry-level wage was $8.40 per hour. Welders throughout the Greater Kansas City area earned an average entry-level hourly wage of $7.60 in 1992.

State: The average hourly wage for welders and cutters in Kansas was between $9.95 and $11.44 in 1993. The lowest reported wage was under $5.90, the highest was over $18.21, and the average entry-level wage was $7.49 per hour.

National: The median hourly wage for welders and welding machine operators was about $11.00 in 1992. The middle 50% earned between $8.55 and $14.05; the top 10% earned more than $17.88, and the lowest 10% earned less than $6.95 per hour.

JCCC Salary and Placement Information

This program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

OTHER JCCC CAREER PROGRAMS FOR WHICH MINIMAL OUTLOOK INFORMATION WAS AVAILABLE

Business Entrepreneurship

JCCC's business entrepreneurship program teaches the fundamentals of starting and operating a business. Coursework covers preparing a business plan, obtaining financing, planning advertising and sales promotions, marketing a product or service and developing an accurate accounting system. Entrepreneurs who already have their business established can strengthen their managerial and business skills through this course of study.

The business entrepreneurship program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

Industrial Programmable Controls

The industrial programmable controls program was developed to meet the needs of manufacturing, business, and industry for workers skilled in sequencing operations by means of microprocessor-based equipment rather than through the use of electrical wiring, motors, belts, etc. The industrial programmable controls certificate was designed for electricians, electronics technicians, engineers, maintenance personnel and others involved in industrial processes. The courses teach programming for relay logic, timers, counters, block transfer, analog and networking.

The program has not been offered at JCCC for a sufficient length of time to provide data from follow-up studies of JCCC career program completers.

Interpreter Training

JCCC's interpreter training program concentrates on developing skills in American Sign Language, deaf culture and fingerspelling interpretation. As the population grows, so will the number of people with hearing problems and the need for interpreters.

All of the respondents to the short-term follow-up and 90% of respondents to the long-term follow-up study conducted in 1994 were working in a job related to interpreter training. Respondents reported average hourly wages of $12.05 and $12.23, respectively.

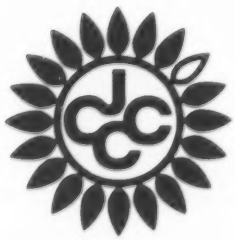
Veterinary Technology

A background in veterinary technology leads to employment opportunities in laboratory care and pharmaceutical animal colonies, or assisting a veterinarian in providing professional services and performing office routines. Students study sanitation and animal care, the preparation of animals for surgery, and anesthetic management. They also perform lab work and use radiologic techniques.

Jobs in the field are plentiful. Dr. Roger L. Lukens states in the May 1990 Veterinary Forum, "The increasing demand for veterinary technicians and the decreasing number of applicants (to veterinary technology programs) are creating . . . a critical manpower problem for the profession."

All of the respondents to the 1994 short-term follow-up study of 1992-93 completers were working in a job related to veterinary technology. The average wage reported by respondents was $7.40 per hour.

Note. Salary and placement information for JCCC career program completers is based on data supplied by respondents to follow-up studies and is not necessarily representative of all career program completers.



Johnson County Community College
Office of Institutional Research
12345 College Blvd.
Overland Park, KS 66210-1299